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FEDERAL TRADE COMMISSION

REPORT

ON

THE WOOLEN RAG TRADE

JUNE 30, 1919



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TO VITAL  
SUBCOMMISSION

**416809**

FEDERAL TRADE COMMISSION.

---

WILLIAM B. COLVER, *Chairman.*  
JOHN FRANKLIN FORT.  
VICTOR MURDOCK.  
HOUSTON THOMPSON.

---

J. P. YODER, *Secretary.*

LETTER OF SUBMITTAL.

---

JUNE 30, 1919.

TO THE CONGRESS OF THE UNITED STATES:

The Federal Trade Commission herewith submits a report on the Woolen Rag Trade. This report covers certain information obtained at the request of the War Industries Board, for its use in regulating the prices of woolen rags. The preparation and issue of this report was authorized by resolution of the Commission on June 30, 1919, and the report is therefore issued as of that date. The compilation of the data, which were already on file, and the preparation of the report was subsequent thereto.

The abnormal demand for wool created by the war, coupled with a shortage of wool at points where it was available for manufacturers, made it necessary to increase the use of substitutes for raw wool. The most important available substitutes existed in the "shoddy" or "reworked wool fiber" derived from woolen rags and from trimmings ("clips") produced in the cutting up of new woolen cloth for the manufacture of woolen garments.

The Government, to assure itself a sufficient supply of wool for military purposes, on April 24, 1918, commandeered the 1918 clip of domestic wool, and later assumed a complete control of its distribution. As a result of such measures there was little wool left available for civilian use. The late summer of 1918 found manufacturers of woolen cloth for civilian use in the position where, according to Government announcements, they would have to rely on "shoddy" or "reworked wool" for their principal supply of raw material. Thus woolen rags suddenly became the chief raw material in one of the leading industries.

As a result, the Woolen Rag Trade, which involves the collection and preparation of woolen rags for the making of wool shoddy, acquired rapidly a great public importance, and there developed in the trade certain conditions requiring immediate Governmental regulation in order to protect the general public welfare. This was especially the case with respect to prices. Current prices on leading and basic classes of woolen rags showed such advances as 300 per cent, 400 per cent, and almost 500 per cent over the year preceding the outbreak of the war in Europe.

The War Industries Board, through its Woolens Section, took action during July, 1918, to control prices and regulate the trade



by promulgating its first list of maximum prices. At the same time it requested the Federal Trade Commission to undertake an investigation of the whole rag situation, for guidance in future action.

This report embodies most of the information thus collected. After a statement of the relation of the manufacture of shoddy to the Woolen Rag Trade, the report gives a brief account of the development of that trade, describes the origin and kinds of commodities dealt in, and the nature of the different functions performed by the various dealers, the course of prices, the profits of dealers, and also presents a comprehensive classification of grades adapted to use in the trade.

Price data furnished by the Woolens Section of the War Industries Board, and price information collected by the Commission's agents directly from the records of dealers, are presented together with a detailed discussion of the nature of the different price changes.

While the prices of woolen rags and clips advanced to high levels in 1917, it appears that the dealers whose records were examined made a lower rate of profit during 1917 (the latest year for which such information was available) than in earlier years when prices were materially lower. Apparently, the reason for this was the increased investment required to handle rags when prices were high. The annual rate of "turnover" (i. e., the relation of receipts from sales to investment) dropped from five times in 1915 to three in 1917. The increase in prices went chiefly to pay for the increased labor cost of collecting the rags, before they came into the hands of the sorters and graders who prepared them for sale to shoddy manufacturers.

Detailed information on the expenses of operation, and the earnings of 12 of the principal firms engaged in the Woolen Rag Trade is also given. This information, gathered directly from the records by the Commission's accountants, covers transactions for the years 1915-1917 of firms which showed on their books a total investment in 1917 of about \$5,750,000, and whose sales during 1917 amounted to about \$18,500,000.

A careful study on the classification of grades and names of used rags and clips was undertaken at the request of the Woolens Section for its use in making further regulations. The termination of the war made it unnecessary to continue Governmental control of the industry. Since, however, in its bearing on some of the problems continually encountered this material has considerable value to the trade at large, it is included in the report.

A brief analysis is given in the report of the export trade on rags, and the effect of the prohibitions placed by the War Trade Board on such exports.

In conclusion it may be noted that while the situation which made the collection of all woolen rags (and clips) a matter of highest importance no longer exists, nevertheless, the trade would be benefited by an increased degree of standardization of its product.

Respectfully,

WILLIAM B. COLVER, *Chairman.*

JOHN FRANKLIN FORT.

VICTOR MURDOCK.

HUSTON THOMPSON.



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# REPORT OF THE FEDERAL TRADE COMMISSION ON THE WOOLEN RAG INDUSTRY.

## I. INTRODUCTION.

### 1. Origin of investigation.

The abnormal demand created by the war for wool for the uses of the Army, Navy, and Red Cross work, and the usual demand for wool for civilian use, coupled with a shortage of wool at points where it was available for manufacturers (due to difficulties of transport from the sources of production, and to the commandeering by foreign Governments of wool of foreign origin usually available to the American market), had the effect of making new wool available to American mills both unusually scarce and high priced. It became necessary to use substitutes to meet the deficit in the supply of raw wool. The most important available substitute existed in the "shoddy" (or "reworked wool fiber") derived from used woollen rags, and from the trimmings ("clips") produced in the cutting up of new woollen cloth incident to the manufacture of woollen garments. The term "rags" is often applied indiscriminately not only to used material but to new material as well. In this report wherever a need exists for distinguishing between these two general classes, the term "used rags" will apply to used or worn material, and "clips" to new or unworn material.

On April 5, 1918, the Boston wool trade offered to the Government through the War Industries Board, all its unsold wools at market values as of that date. This offer was not accepted. On April 25, 1918, they offered to the Government all their unsold wool and tops included in the offering of April 5, and also all foreign wools bought since that date and not under the Government's option, on the following terms:

July 30, 1917, prices to be paid for all wool costing dealers July 30 prices or less. For all wool shown to have cost dealers price in excess of July 30 prices, the Government to pay 5 per cent above cost on all grades, this total in no case to exceed April 5 prices.

On April 27, 1918, the Government accepted this offer and requested that other trade centers whose wools were offered be notified. (See Appendix, Exhibit I.) On May 20, 1918, the War Industries Board, through its Wool Division, promulgated the Government regulations for handling the wool clip of 1918, which assumed a complete control of its distribution.



The taking of such steps was to assure a sufficient supply of wool for military purposes. The need was brought home to the country at large, in the course of testimony given on August 7, before the Committee on Military Affairs of the United States Senate by Gen. Peyton C. March, Chief of Staff of the United States Army. He stated, incidental to the discussion of the question of uniforms for the new Army:

"Just to give one instance, take the mere question of new uniforms for this new Army. We must commandeer—and have done so—all of the wool of the United States; and have taken the wool of the Argentine. We are going to put the whole civilian population on shoddy for the next year, but you can not do this thing offhand."<sup>1</sup>

This statement received wide publicity in the public press.

A month later the chairman of the War Industries Board in urging upon the country the necessity for the conservation of wool made public a statement of the woolen section of that board that there was at that time no free wool available for civilian consumption. He issued a warning that it would be particularly difficult to renew when exhausted the then existing stocks of cloth and clothing. (See extract from Official Bulletin, Sept. 13, 1918, reprinted in Appendix, Exhibit II.)

The announcement then made that there was no free wool available for civilian allocation was repeated by the chairman of the War Industries Board in another statement published shortly prior to the signing of the Armistice (see extract from Official Bulletin, Nov. 5, 1918, reprinted in Appendix, Exhibit III), that no allotments of wool for civilian purposes could be considered for some time to come. Definite statement to this effect was made for the purpose of removing any uncertainty with respect to the seriousness of the situation and for the purpose of impressing upon the country as a whole the urgent necessity of the conserving of every pound of wool.

Thus the late summer of 1918 found manufacturers of woolen cloth for civilian use in the position where, according to official Government announcements, they would have to rely on shoddy (reworked wool) obtained from woolen rags and clippings for their principal supply of raw material. This situation was reflected in the announcement of the Railroad Administration (see extract from Appendix, Exhibit IV), dated August 15, 1918, that it was prepared to issue promptly permits on shipments of woolen rags and shoddy and requiring the prompt acceptance and movement of such shipment on a parity with wool.

In a short space of time woolen rags had become an essential raw material.

<sup>1</sup>Hearings before the Committee on Military Affairs, United States Senate, 65th Cong., 2d sess., vol. 1, p. 39.

"As a result of such conditions, the woollen-rag trade, which involves the collection and preparation of woollen rags for the making of wool shoddy, acquired rapidly a public importance unprecedented in its history. Coincident with this growth of importance, there developed many undesirable features of such a nature as to necessitate some immediate governmental regulation of the trade in order to prevent the increasing abuses from seriously affecting the general public welfare. Chief among such abuses was the rise of prices to heights which imposed undue burdens on the consuming public. Current prices on leading and basic classes of woollen rags as compared with the average price for the year preceding the commencement of the European war in 1914 showed such advances as 300, 400, and almost 500 per cent.

The situation in July, 1918, was the more acute because a year previously, in the summer of 1917, leading men in the woollen-rag trade had sought to curb the rise of prices by means of a voluntary agreement between a substantial number of dealers. The losses incurred by those who observed the restrictions, and the profits derived by those who deliberately disregarded them, rendered the attempt so unsuccessful that it was abandoned early in 1918. From that time to the month of July transactions were wholly uncontrolled. Prices of some grades increased 50 per cent within the two or three months, and as much as 30 per cent within the 30 days, preceding the 10th of July, 1918. At that time the United States had in field and camp an Army of over 2,000,000 men and was preparing for an additional 2,000,000. The increasing importance of shoddy (or reworked wool), not only as a partial source of wool for military purposes, but also as practically a complete substitute for raw wool for civilian use, rendered it imperative for the War Industries Board to take action to control the distribution as well as the prices for both woollen rags and shoddy. Preliminary steps to this end were taken July 12, 1918.

The special precautions which were taken at this time for the conservation and safeguarding for use in this country of every pound and every scrap of wool are shown still further by the steps taken to prevent exportation. The War Trade Board had, a few months preceding, placed an embargo on exports of all woollen rags with the exception of five grades for which there was little or no demand in this country on account of the very inferior quality of shoddy which could be made from them. But the stringency of the situation was such that a trade recommendation was made that the embargo be extended to cover these five grades. Accordingly, a short time after the taking over of the control of rags in this country by the Government, a complete embargo was placed on the exportation of woollen rags (see p. 53).

The general importance of establishing maximum prices and a control over the distribution of woolen rags and shoddy was confirmed by the action of Great Britain. A few days after the action taken by this country, Great Britain, according to cable reports from London dated July 17, 1918, took complete control of the rag and shoddy trades and shortly after, under date of July 25, issued an order of the Army Council, through the Director of Raw Materials, fixing prices on woolen rags and shoddies as of market values on March 31, 1918.

One of the steps taken by the War Industries Board to render effective its control of the woolen-rag trade and shoddy industry in this country was to request the Federal Trade Commission to undertake an investigation of the whole rag situation, for guidance in future action. The Commission, accordingly, arranged to undertake the investigation and started the work early in September, 1918.

## 2. The woolen-rag trade and its relations to shoddy (or reworked wool) manufacture.

Since the main use of woolen rags handled by the woolen-rag trade is for the manufacture of shoddy (or reworked wool), a brief description of that industry is necessary, before the character of the woolen-rag trade can be clearly set forth.

*The shoddy (or reworked wool) industry.*—The raw material out of which wool shoddy is manufactured consists of used woolen rags of all kinds; of the trimmings and clippings and left-over scraps or pieces (called clips) of new material accumulating in tailoring and garment manufacturing establishments; and of the head and end pieces (headings), which are cut off at the textile mills, when a "piece" of cloth comes from the loom.

Fabrics which are made partly of wool and partly of cotton are first treated by having the cotton carbonized out of them by a chemical agent, such as sulphuric or hydrochloric acid, which affects the animal fiber but slightly if at all. They are then, together with the all-wool fabric, passed through machines known as "pickers" and "garnetters," which unravel and "tease" out the cloth structure until it is reduced to a fiber. This fiber is adapted to similar purposes as raw (or "virgin") wool, except that the staple is shorter and the resultant wool in most instances is in a dyed state.

The process was originated and developed between the years 1810 and 1820 in Great Britain. While "shoddy" is its most common name, the product is also known by other names. One of them, "substitute wool," is clearly a misnomer, for the commodity is wool. It is, in reality, a substitute for *new* wool, being actually woolen cloth reconverted into its unmanufactured state. Names for it more descriptive than "shoddy" are "reworked wool," "recovered wool," and "reclaimed wool."

As raw material in the manufacture of woollen cloths reworked wool is used precisely as new wool is used. It is not customary to use shoddy alone in the manufacture of cloth, but it is blended with new wool, wool noils and flocks, and new wool waste obtained during the manufacture of woollen textiles. It is generally used in an admixture with new wool in varying percentages, depending upon the quality and texture of the cloth to be produced. It can be used in the manufacture of all goods made with wool with the exception of worsted. It is more commonly used, however, in the manufacture of heavy material such as blankets, overcoating, heavy suitings, and also in cheap suitings, irrespective of weight, particularly where cotton is used in connection with wool. Materials made with reworked wool are stated to be invariably harder and stiffer in texture than those made solely of new wool. Its judicious use in connection with new wool has often resulted in the production of cloth which is of as good a texture as much of that made entirely of new wool and is also fully as serviceable. It is possible for cloth made with a suitable admixture of high grade shoddy to be preferable to cloth made entirely of a poor quality of new wool. As is evidenced by the statistics of shoddy manufacture, a large part of the woollen clothing worn by the general public is made of materials which include shoddy to some extent. The importance of shoddy to this country at the time this investigation was instituted can be appreciated best when it is realized that the War Industries Board had arranged specifications calling for the use of 50 per cent reworked and 50 per cent new wool in the manufacture of many of the woollen materials then being contracted for to be supplied to the Government for the use of the Army. In addition the War Industries Board had restricted the allotment of new wool to manufacturers to such an extent as to necessitate the use of shoddy in greatly increased proportions in the manufacture of all woollen materials for civilian consumption throughout the nation.

It was about the year 1850 that the manufacture of shoddy (or reworked wool) first came into use in the United States. That was some 25 or 30 years after its origin in Great Britain. It appears to have had a ready reception, for in the year 1859 there had been established in this country some 30 shoddy producing establishments valued, according to data of the time, at approximately \$400,000. From that period on various mills engaged in the manufacture of woolsens procured machines for making shoddy (or reworked wool) with a view of using the product in their respective mills. To-day it is estimated that about half of the shoddy (or reworked wool) used is made by plants engaged solely in its manufacture and half by woollen mills which produce for themselves the shoddy which they have occasion to use.

According to the United States Census of Manufactures for 1914 (the latest figures available) there were 84,836,759 pounds of shoddy manufactured in the United States in 1914. Of this, 40,787,349 pounds were reported to have been produced for their own consumption, 893,373 pounds for sale by establishments engaged in wool manufactures, and 43,156,037 pounds by establishments producing it solely for sale. To make the shoddy a total of 119,450,978 pounds of used rags and clippings was required. During the five-year period 1909-1914, both the quantity of shoddy made and of rags used increased 14 per cent. There were 64 establishments manufacturing wool shoddy for sale, using the services of 2,391 persons. The value of products was stated to be \$7,706,843, of which \$2,406,940 was the value added by manufacture (value of products less cost of materials). Of the total cost of materials (\$5,299,903) rags and clippings (amounting to 57,367,962 pounds) formed about 60 per cent. During the five year period 1909-1914, there had been an increase in the quantity used of 32 per cent and its total value had increased 17 per cent.

On the basis of certain reports obtained by the United States Census Bureau from shoddy pickers, for the years 1915, 1916, and 1917, the total production of wool shoddy in the United States for those years is estimated as follows:

	Pounds.
1915.....	168,000,000
1916.....	168,000,000
1917.....	184,000,000

The function of the shoddy industry to-day consists in supplying to the woolen manufacturer a raw material at a less cost than new wool and in a state to adequately serve the precise purpose for which he desires to use it. As a matter of practical manufacturing a woolen mill can, by using certain colored shoddy, save itself the expense of dyeing, which would have to be incurred with new wool. A high degree of technical experience is needed in the economical production of shoddy in special grades required for special purposes. It involves the determination as to how the grade and shade of shoddy desired can be best manufactured, if at all, out of particular grades of rags, clips, or headings available. By far the largest quantity of raw material obtained for conversion into shoddy is that derived from "new clippings" and old rags. In short, there would be no shoddy industry at all were it not for the available supply of both new and old rags which for centuries had been regarded as waste. The industry is, therefore, dependent on the woolen rag trade for its principal raw material, furnished in the form best adapted to its manufacturing needs.

*Development of woollen rag trade.*—At the time when the shoddy industry was first established, shoddy manufacturers generally procured their woollen-rag materials direct from the peddlers and junkmen who collected it and from the places where tailoring clippings were produced. Sorting and grading of rags was then part of the shoddy manufacturers' business, and not of the business of the collector. To-day, this work has become so extensive, the demands for the material have become so large, and the refinements of grading have become so numerous, that these functions have been joined to that of collection, and have become a part of the woollen-rag trade.

Authoritative statistics are not available showing the present extent of the woollen-rag trade. The census of 1910 (Vol. IV, Occupation Statistics p. 422) listed 1,975 rag dealers (including also rag peddlers and pickers, and 1,678 rag sorters). No distinction was made between the handlers of woollen rags and those handling other fabrics.

On the basis of the reports obtained by the Census Bureau from shoddy pickers, the quantity of woollen rags necessary to make the quantity of shoddy production stated above is estimated as follows:

	Pounds.
1915.....	225, 000, 000
1916.....	215, 000, 000
1917.....	248, 000, 000

In other words, it takes about one and one-third pounds of rags to make a pound of shoddy.

Since all the work has to be done by hand the collection, sorting, and handling of about 250,000,000 pounds of woollen material, particularly as in the case of new rags where the pieces are frequently but an inch or two square, calls for much human labor. To those unacquainted with the complicated gradings which have been developed in the growth of the treatment of woollen rags in preparation for conversion into shoddy, the scope of the woollen-rag trade to-day appears nothing short of amazing. It is essential to an understanding of the complex character of the present trade in woollen rags to take into account the various sources and kinds of commodities in which it deals.

*Origin and kinds of commodities dealt in by the woollen rag trade.*—The general source of supply of all used woollen materials throughout the United States is the heterogeneous collection of old garments, etc., collected by both the country and the city peddler and disposed of by him to the junkmen throughout the country. This product has been given the general trading designation of "Mixed country rags." It is the elementary stock from which are derived the broad classifications into which all old woollen rags are divided. The standard price of "Mixed country rags" at the beginning of 1918 was 2

cents a pound. The collection consists of cotton as well as woolen rags, rubberized materials, and kindred products. The percentage of woolen rags which is obtained on the average out of 100 pounds of "Mixed country rags" is fairly definite but varies somewhat with the section of the country in which the rags are gathered. The percentage of woolen materials ranges usually in the neighborhood of 20-30 per cent of the total weight of "Mixed country rags." All used woolen materials are sorted first into two principal classifications:

(1) Soft woolen materials, usually designated as "Soft woolens" or "Mixed softs," which consist of knitted materials, serges, and merinos, being chiefly clothing worn by women.

(2) Hard woolen rags, usually termed "Rough cloth," which consist of materials used in men's wear, principally worsteds. These two classifications are further subjected to extensive subclassification and grading. In addition to these two principal classifications there are derived from "Mixed country rags," five classifications of minor importance, which are not subjected to the extensive sorting and grading which takes place with respect to "Soft woolens" and "Rough cloth": Such classifications are "Carpets," "Felts," "Haircloths," "Linseys," and "Seams."

New woolen materials, as already stated, are mainly divided into "clippings," which comprise remnants and pieces derived from the cutting tables in manufacturing and tailoring establishments, and "headings," which are the head and end pieces which come from mills manufacturing woolen piece goods. "Clippings" far exceed "headings" in importance. The two general divisions of clippings are "Ungraded clips," and "Graded clips." "Ungraded clips" are roughly divided into mixed cuttings of woolen and cotton materials, cuttings obtained from makers of men's wear, cuttings obtained from makers of women's wear, cuttings from materials used for upholstering carriages and automobiles, and cuttings from felts. "Graded clips" comprise as many divisions and subdivisions as there are kinds and shades of woolen materials in existence. Ungraded headings are first sold in the state originally gathered. After they come into the hands of dealers they are usually mixed with clippings of the same sorts of materials which the dealer has on hand and are graded with them.

While there are but a few primary general classifications, three of them, "Soft woolens" and "Rough cloth" rags and "Ungraded clips," are subject to many further subdivisions. Thus one dealer who sold to shoddy manufacturers was found to carry 175 grades on his list, another 118, the price-fixing committee of the War Industries Board, in its price regulations issued August 19, 1918, listed 114 grades, and in the classification prepared by the Federal Trade Commission for the War Industries Board and revised in cooperation with

it, there appear about 570 grades. To one unfamiliar with the trade it is almost inconceivable that there should be so many grades of woolen materials commonly dealt in as is actually the case. Not only are there a large number of grades but many of the grades have two or more designations. The result of the absence of any standard system of grades and nomenclature is that many dealers do not recognize material of the same grade under its various names, and that the same name is confusedly applied to two or more grades.

*Industrial organization of woolen-rag trade.*—When classified along broad lines the various kinds of dealers can be described roughly as—

(1) The “collector” or “peddler”, who gathers the raw material of the trade.

(2) The “sorter”, who is frequently also a junkman, and who sorts the material into primary classifications.

(3) The “grader”, who subdivides the primary classifications more finely than the sorter.

But the woolen-rag trade is one where the different types of operators or dealers are not clearly defined at any stage of the handling which woolen rags (including under this term both used rags and clips) go through in the course of being collected and prepared for manufacture into shoddy. Many of those in the business perform two or more functions with respect to the many different materials which they handle, while there are at the same time also in the business many who handle but a limited or special class of material and may perform only one, or, at most, two functions. The steps through which both used and unused materials go in the logical course of their handling are practically the same. The details of handling, however, differ because of the innate character of the material. “Used rags” are composed of worn, faded, dirty materials and come frequently in large pieces. “Clips” consist primarily of small trimmings, edges, scraps of material—the residue of the cutting-table operations—are fresh and comparatively clean, and by reason of their unworn condition and the brightness of their colors constitute a commodity which it is economically worth while to subject to more careful grading than used rags. From the time that a rag, whether used rag or clip, is collected to the time when it is manufactured into shoddy it passes generally through four stages, each of which may have been reached through the activities of a dealer engaged solely in giving rags that particular treatment, or it may be that one dealer may have performed at his plant two or all of the three handlings occurring after its collection. In order that this may be understood readily, the handling of used rags and clips will each be traced briefly.

The first stage through which the used rags pass is that of collection by men popularly known as the “ragman”, the “old clothes man” or the “cash-clothes man.” In the trade they are generally



known as the peddler or collector. It is more true of the collection of woollen rags than of any other phase of their handling that this step is handled almost entirely by dealers who perform but one of the several functions in the trade.

The second stage through which the used rags pass is that which is furnished by the junkman who purchases from the peddler. His task is to divide the woollen materials which he accumulates into the two principal classifications, "Soft woolens" and "Rough cloth," and the minor classes of "Carpets," "Felts," "Haircloths," "Linseys," and "Seams." The "Soft woolens" are generally designated as "Mixed softs" and the standard grade thereof is known as "Best mixed softs"—in so far as there can be said to be any common standard or basis used by the trade for pricing purposes. "Rough cloth" is the trade name for what might be called "hard" woollen rags, when in the condition which the junk man usually handles them, that is, the condition in which they are purchased from the peddler. "Rough cloth" consists of old clothes worn by men and boys—coats, vests, trousers, overcoats, caps—in short, all *outer* garments made of wool. When these garments have had ripped from them all cotton cloth padding, lining, and buttons with which they are made up, they are designated in the rag trade as "Skirted cloth." It so happens in the collection of rags that many pieces of woollen fabric will be collected which have no other material attached. Such material is slightly more valuable than the "Rough cloth." Accordingly a peddler may collect and sort out those pieces, and sell them separately. But generally speaking, "skirted" cloth in the woollen rag trade is obtained from "Rough cloth" by the ripping and tearing-off labor of the junkman.

The third stage through which "Soft woolens" and "Hard cloths" pass consists in being sorted into divisions based on the fabrics of which the rags are made or on their colors, or both. When bales of "Mixed softs" rags have been re-sorted or graded and their contents made into bales of straight white "Soft woolens," or "Red knits" or "Light serge" or "Coarse dark merinos," etc., they become bales of *graded* rags.

This third stage is handled variously by dealers known as sorters or graders. The junkman when dividing the woollen rags into the primary classifications rarely performs the technical operation known in the woollen rag trade as "sorting". If, however, he is a "big junky," he may find it profitable to "skim" his rags with a view to selling one or two grades separately because of the increased price which such grades command. But usually, it is principally the sorter who in the first instance divides "Rough cloth" and "Soft woolens" into grades. It is to be noted next that it is the invariable result that such first sorting does not produce anything like a pure

grade. Where the demand, therefore, of the shoddy producer is for a bale of rags containing as far as practicable only the particular fabric, and, in addition perhaps, the particular shade of that fabric which he desires to turn into shoddy, a regrading of many bales is required to fill the order. This last function is generally known strictly as "grading" in contradistinction to the function previously described under the term of "sorting". These two functions are performed in some cases by the same dealer and in other cases by different dealers. The operation of sorting is one which is handled with greater or less care depending upon the character of the demand of the dealer's usual customers, or the specific requirements of a particular order. The business of grading is a more carefully handled one than that of sorting, requiring more expert labor and the results produced are of as high a standard as the individual dealer desires to attain—or maintain. They depend necessarily upon the grade of article demanded and the price paid for it by the purchaser. This function of the business is probably the most valuable from an economic standpoint. It can be said correctly that it rests in the hands of a group of dealers whose business can be regarded as the most firmly established of any in the woollen-rag trade and who are regarded as the most reliable element in the market. Particularly amongst those dealers who limit their business solely to grading and regrading and especially those dealing in clips solely, will be found the leading types of business men engaged in the trade. It should be added, however, that the mere fact that a woollen-rag dealer is in this class does not signify that his methods of doing business are *necessarily* any different, or any more reliable than those of the other three classes of dealers. The grader of old or new rags, or both, where he is a large dealer, invariably performs also the functions of the sorter; but in the trade he is classed as a grader. It is to be noted that the term "packer" is also currently used to designate this class of dealer. In so far as it may be regarded as subject to control by any one class of dealers, the grader rules the trade.

The industrial organization of the trade presents the anomaly of a trade which has associations of dealers and yet, which considered as a whole, and in comparison with other industries, must be classed as an unorganized trade. For while there are two organizations of influence in existence they represent only a limited, though commercially powerful, class of dealers in the woollen-rag trade. This is a natural situation, readily enough understood when the general make-up of the trade is considered. The great number of collectors and of junkmen, both large and small, are all of them dealers in woollen rags, but the dealings of each are so small and their distribution throughout the country so wide, that it would be almost a physical impossibility to organize and control them. Then there is the large

intermediate class of the sorters of both new rags (clips) and old rags, whose business is of such small size, of so shifting and uncertain a character, and so widely distributed, as to make them difficult to organize. The sorter is virtually the connecting link between the original producer of the woolen rag (i. e., the collector or junkman) and the ultimate producer—the grader—who is the head and backbone of the trade. It is among the graders that the two associations exist. And while not having, nor exercising, control of the industry as a whole, they do exercise some leadership.

There are two well known associations: the National Association of Waste Material Dealers which has special sections composed of woolen rag, wool waste, and shoddy dealers, with headquarters in Boston, Mass., and the Wool Stock Graders' Association, an organization developed after the United States went into the war. Both of these organizations had war service committees, composed exclusively of rag dealers, and comprised the main nucleus in cooperation with which the Government took up war matters pertaining to this trade. These two organizations undertook also to keep their members advised of developments vitally affecting the trade; and from time to time they also presented to Government representatives recommendations of measures which they thought should be put into effect. At the same time, groups independent of these associations formed themselves at various times, temporarily, with a view to taking up trade matters, with respect to which, in their opinion, special action was called for.

### 3. Status of price fixing at time of Commission's investigation.

In the summer of 1917 an informal agreement was entered into between a substantial number of dealers, mostly graders, which operated by means of voluntary regulations to restrict prices of old rags. These regulations were accepted and lived up to by the trade in general for a number of months. Toward the end of 1917, however, they began to be disregarded by the dealers in mixed rags who began to refuse to sell the basic grades—"Rough cloth" and "Mixed softs"—at the prices which had been fixed by agreement. The result was, that the graders could not continue to work up the rags and dispose of them at the prices fixed for graded rags with the estimated profit to the graders. In consequence this voluntary attempt to regulate the trade was abandoned early in 1918. For some months thereafter prices were wholly uncurbed and many grave trade abuses flourished unchecked.

A brief reference has already been made to the serious situation which this condition of affairs in the woolen-rag trade was causing on account of the scarcity of new wool available for military as well as civilian clothing. It is now desirable to go further into detail, in

order to explain fully the activities of the War Industries Board, in its price regulation of the trade.

Both old woolen rags and clips showed violent rises in price in the one month culminating around July 10, 1918. The leading grade of soft woolens, "Mixed softs," had gone up in price from 18 to 22 cents—an increase of 22 per cent. Unsorted "hard" woolens, "Rough cloth," had advanced in price from about  $7\frac{1}{2}$  to  $9\frac{1}{2}$  cents—about 30 per cent. The graded stocks of old rags in this period of a few weeks showed advances varying from 10 to 30 per cent, bringing them to top prices which had never been reached before.

With respect to new rags the situation was even more acute. The leading class of ungraded new clips, "Fine merchant tailor" had gone up from the neighborhood of 28 cents to a quoted range of 34 to 36 cents with published rumors of sales at 40 cents. The leading graded stock, "Blue worsted" had risen in price from about 40, and 45 cents, to 60 cents. Khaki clips were largely owned by the Government and thus taken out of the rag market. But there were some grades coming into the market from manufacturers of officers' uniforms, and sales of the best grade khaki worsted were reported as made at 80 cents and more per pound.

The case of khaki worsted furnishes, no doubt, the best illustration of what was possible in the way of unprecedented high prices in woolen rags. Since the outbreak of the war khaki clips had been in unusual demand for manufacture into khaki shoddy. For some months, however, prices of "Blue worsted," "Black worsted," and "Blue serges," and "Black serges," the leading grades for civilian consumption, had been keeping pace with the advance of khaki worsted. Within the year each had risen in the neighborhood of 100 per cent, of which approximately 50 per cent took place within the 60 days prior to July 10.

Details of the situation at this time are to be found in the columns of the Textile World Journal, the Waste Trade Journal and the Commercial Bulletin (Boston).

Because of the events which had led up to the taking over from private control of the Base Sorting Plant by the Quartermaster Corps of the United States Army, and the extreme demoralization and distrust prevailing in the rag trade at the time, the War Industries Board, following some informal conferences with leading dealers, took preliminary action in regulating prices on July 12, 1918. This action was in the form of an announcement signed by A. L. Gifford, Woolen Rag and Fiber Administrator, stating that in accordance with the authority given him by the War Industries Board, it was his intention "to fix and enforce maximum prices on rags entering into the manufacture of woolen fabrics." He stated that announcement of the maximum prices would be delayed, and directed that

"until further notice no dealer make any sales of rags at prices in excess of those quoted in the last issue of the recognized waste trade publications previous to July 8, 1918." He also notified each rag grader and producer (or retailer) of rags to at once mail him a record of all sales during the week ending at noon, Saturday, July 13, 1918. Such statement had to include the names of the purchasers, the quantity of each grade, and the price at which each was sold. The full text of the announcement will be found in the Appendix (Exhibit V).

The names of the "recognized waste-trade publications" were not stated, and there was some uncertainty in the trade as to the exact maximum prices which were thus specifically established. Nevertheless, the action amounted to a temporary "pegging" of prices, within certain fairly well recognized limits.

On August 19, 1918, the Price-fixing Committee of the War Industries Board fixed prices on a listed number of grades of old woolen rags. The text of the announcement appears in the Appendix (Exhibit VI). On August 21, 1918, the Price-fixing Committee took similar action with respect to new woolen clips (Exhibit VII), and on August 22, 1918, on a list of shoddies made from grades of woolen rags specified (Exhibit VIII). Each of these sets of prices was made effective until October 1, 1918, and thereafter "pending the compilation of data which is to be furnished by the Federal Trade Commission." It should be noted in connection with the prices fixed on new materials that the announcement stated that they were "based on high standard of grading and should not be paid for inferior packing."

On the day following the publication of the prices fixed on old rags, the Rag Administrator announced that on all grades of old woolen rags not contained in the schedule, the temporary prices as of July 8 (fixed in his announcement of July 13) must be regarded as constituting maximum prices. It should be specially noted that no such announcement was made with reference to the prices promulgated on new rags and shoddies on August 21 and 22. Subsequently, the Woolen Rag Administrator construed all three promulgations of regulations and prices to preclude dealers in the trade from carrying on transactions in any of the commodities not listed among those on which maximum prices had been fixed.

## II. THE CHARACTER AND SCOPE OF THE COMMISSION'S INVESTIGATION.

### 1. Necessary lines of investigation.

At various conferences held between the Commission and the War Industries Board, following the request for an investigation of the woolen-rag situation, it was determined that the fundamental information to be sought was the extent to which the very marked rise in

prices during the preceding few months was justified, if at all, by basic conditions, and to what extent it was unjustified and might be checked artificially without injustice to the trade, and yet allow to dealers profits sufficient to stimulate maximum production.

Since the woollen-rag trade consists in the grading, regrading and subgrading of used rags, clippings and headings, with a view to meeting the requirements of the shoddy manufacturer, it was also necessary to obtain sufficient information on the character and needs of the shoddy industry to enable the War Industries Board to deal with the various problems presented.

Adequate consideration of the general problem involved some study of the history of the industry as well as a detailed examination of its present operation; of the character, nature and quantity of its raw material; of the characteristics of the dealers, as well as of the class of labor engaged in carrying on the industry; and of those methods and customs of the trade which fundamentally affect its conduct and influence prices.

It was apparent at the commencement of the work that some adequate determination of what were the grades which went to make up the commodities in which the industry dealt, and a standardization of their nomenclature, constituted a fundamental prerequisite to the making of recommendations which could be used as a basis for uniform regulation.

Accordingly, a complete survey was made of all grades of materials in current use, and the extent to which each was dealt in. Attention was also given to the determination of a definite uniform nomenclature which should be established for use in the regulation of the industry.

The lines which the investigation followed after the requisite preliminary work on classification and standardization consisted chiefly in procuring actual figures directly from the books of dealers in the industry on the actual prices at which the leading commodities were originally acquired by the dealer; how many times they changed hands, and with what variation in price, prior to reaching the ultimate consumer; the prices at which they were finally sold; and the percentages of profit made by the dealers investigated.

## 2. Character of records.

A general survey was first made of the various classes of dealers with a view to ascertaining what information was procurable from the records kept by them. It was found that the condition of the records of dealers varied from no books at all (paper-slip records of daily transactions being made, which were lost or torn up) to complete sets of books such as are kept by first-class mercantile or manufacturing concerns. Only a small percentage of dealers of the total

who were visited were found to have kept records sufficiently accurate and intelligible for use in the investigation. It should be borne in mind that this statement refers to the trade as a whole, in which are included the small peddler or collector, the junkman, the sorter, and the grader. In general, no records were available for the first two classes. The records of the last two classes were found to be in some instances very good and in others very bad. If the business done had been actually recorded it was easily possible to obtain the information desired, even though the books might not, from an accounting standpoint, have been well kept. In most instances, however, a full set of books was not kept. The result was, that only a small proportion of the dealers, primarily those conducting the larger businesses in the industry, particularly in the class of graders, were found to possess adequate records. A further examination, however, showed that through the investigation of a selected number of concerns in various sections of the country accurate data could be obtained with respect to a large percentage of the total business transacted in the industry. Furthermore, there were instances where the records of smaller dealers and of dealers specializing along certain lines furnished information accurately typical of the general situation for such classes of dealers.

### 3. Number and nature of firms examined.

By reason of the fact that by far the greater portion of the business is done east of the Mississippi River, and, approximately, north of the Ohio River and of a line drawn therefrom to the Atlantic seacoast, it was possible to obtain access to the available records without having to cover too wide a territory. The records of 15 dealers, all of whom were engaged not only in the final grading of material before its sale to shoddy manufacturers, but also in prior parts of the business as well, were selected for examination. These 15 firms are located in various sections of the country and are representative of medium-sized dealers as well as large dealers, and represent different kinds of business and different kinds of dealers. The books of these concerns were examined by accountants. They investigated concerns located in Boston, New York, Baltimore, Cleveland, and Chicago. Their main task consisted in procuring information from which the profits derived from the business could be ascertained. Their work was carried on in such a manner as to obtain figures which permitted valid comparisons to be made between the business of different dealers.

In addition to the foregoing dealers, some 25 concerns were visited in the city of New York. They included dealers conducting a small business, as well as dealers specializing in only a very limited section of the business. The books of these concerns were examined for the purpose of procuring data on the actual prices of commodities which

they bought and sold during the 18 months prior to the time of the investigation. Similar price data was obtained by the Commission's agents at the majority of the concerns visited by them. This price information, presented in this report, comes from a variety of concerns, numbering in all 40 dealers. They can be considered as adequately representative of the industry as a whole.

### III. INFORMATION COLLECTED BY THE COMMISSION.

#### 1. Price information obtained.

Use was made of prices from three sources: Published prices, prices of actual sales reported to the War Industries Board, and prices of actual sales collected by the Commission's agents.

*Published prices.*—The information on published prices of woolen rags is given for two periods. The first covers the years 1904 to 1911, inclusive, a representative period prior to the European war. The second covered the period from January, 1913, through March 1919, and presents the price situation immediately before the outbreak of the war and the effect on prices produced by the war.

The price information used for the first period (1904–1911) originally was published in the American Wool and Cotton Reporter. The table showing prices for 21 grades appearing in the Appendix (Exhibit IX) is reprinted from page 80 of the report of the Tariff Board on Schedule K (1912). Prices shown for two principal classifications of old (used) rags and one of clips are as follows:

TABLE 1.—Prices of "Rough cloth" and "Soft woolen" used rags and "Fine merchant tailor" clips, 1904–1911.

[Cents per pound.]

Year.	Skirted cloth mixed.		Soft woolens (No. 1).		Fine merchant tailors (all colors).	
	High.	Low.	High.	Low.	High.	Low.
1904.....	6	3½	10½	7	10	7
1905.....	6	5½	11	8½	11	8
1906.....	6	5	10½	9	12	9
1907.....	5	4	9½	8	12	11
1908.....	4½	4	8	5	12	10
1909.....	4½	3½	6½	5	11½	7
1910.....	4½	2½	6½	5	8½	7
1911.....	2½	2½	6½	4	8	5

The price information used for the second period (January, 1913–December, 1918) was compiled from trade paper sources by the Price Section, Division of Planning and Statistics, of the War Industries Board, as far as August, 1918, and brought down through March, 1919, by the Federal Trade Commission. Quarterly and yearly prices shown for the two primary classifications of old (used) rags, and



one of clips, together with the corresponding index number or relative price, based on the average monthly price for July 1, 1913–June 30, 1914, are as follows:

TABLE 2.—Prices of "Rough cloth" and "Soft woollen" rags and "Fine merchant tailor" clips, January, 1913–March, 1919.

	Rough cloth.		Soft woolens (best mixed).		Fine merchant tailor clips.	
	Actual prices per pound.	Index No. (base = 1.62 cents).	Actual prices per pound.	Index No. (base = 5.34 cents).	Actual prices per pound.	Index No. (base = 7.89 cents).
<b>1913.</b>	<i>Cents.</i>		<i>Cents.</i>		<i>Cents.</i>	
January–March.....	1.79	110	6.65	125	7.25	94
April–June.....	1.60	99	5.54	104	7.88	102
July–September.....	1.50	93	5.14	96	6.80	88
October–December.....	1.58	98	5.31	99	7.83	102
Year.....	1.62	100	5.66	106	7.44	97
<b>1914.</b>						
January–March.....	1.70	105	5.54	104	7.83	102
April–June.....	1.70	105	5.38	101	8.29	108
July–September.....	1.56	96	4.94	93	7.75	101
October–December.....	2.63	162	6.54	122	9.00	107
Year.....	1.90	117	5.60	105	8.22	107
<b>1915.</b>						
January–March.....	4.00	242	8.67	162	11.50	150
April–June.....	2.92	180	7.71	144	12.50	163
July–September.....	4.67	288	10.21	191	14.08	183
October–December.....	6.14	379	12.17	228	17.00	221
Year.....	4.43	273	9.69	181	13.77	179
<b>1916.</b>						
January–March.....	8.86	548	16.21	304	25.00	325
April–June.....	6.11	377	12.30	230	21.00	273
July–September.....	5.09	314	11.42	214	19.50	254
October–December.....	6.13	378	13.13	246	20.67	269
Year.....	6.55	404	13.26	248	21.54	280
<b>1917.</b>						
January–March.....	5.09	314	12.33	231	21.33	277
April–June.....	4.96	306	12.67	237	20.17	262
July–September.....	5.38	332	13.42	251	21.50	280
October–December.....	5.34	330	13.71	257	22.83	297
Year.....	5.19	320	13.03	244	21.46	279
<b>1918.</b>						
January–March.....	5.46	337	14.00	262	25.67	334
April–June.....	6.96	430	17.42	326	28.33	368
July–September.....	8.75	540	21.50	403	35.83	465
October–December.....	7.79	480	19.62	367	36.33	471
Year.....	7.24	446	18.14	337	31.54	410
<b>1919.</b>						
January–March.....	6.75	416	16.75	313	29.67	387

The prices during 1904–1918, shown in the two foregoing tables indicate that the general trend for old (used) rags was rising in 1904 and reached a high level in 1905 and 1906. A fall then set in which continued through 1911. Prices for 1912 were not available, but in 1913 the level was below that of 1911. Prices then began to rise, the highest point reached being in 1918. The price movements of clips was in general similar, except that the first rise cul-

minated in 1907, a year later than the case of old (used) rags, and there was no marked decline until 1909. Detailed monthly, quarterly, and yearly prices for 7 grades of used rags and 6 of clips will be found in the Appendix (Exhibit X).

*Prices reported to the War Industries Board.*—The prices obtained by the War Industries Board were reported to it by dealers on signed (and sometimes sworn) weekly reports, which set forth their transactions during the specified periods.

From its inception the Woolen Rag Branch of the Woolen Section of the War Industries Board required weekly reports to be made it by dealers in the trade, showing the quantities traded in and the prices of all sales and purchases made by all dealers, as well as their stocks on hand. In cooperation with the Federal Trade Commission's force, these data were transcribed, examined, subjected to verification and special explanation, and then coordinated and analyzed for the purpose of determining high and low prices and also the general prevailing price of each of the commodities inquired into.

A statement which summarizes for 96 grades the price information derived from these reports, for the months of July, August, and September, 1918, appears in the Appendix (Exhibit XI). The purpose of this work was to furnish the information necessary for a proposed revision of the then existing maximum prices. This statement was drawn up to show the high and low price of each of the grades named in the maximum price lists; also, the "generally prevailing price" during the two months or so covered by the report. For the securing of the generally prevailing price it was necessary to study special transcripts made for this purpose of reported prices, as well as the number of transactions and the pounds of rags covered by them. The statement also shows the maximum prices in effect, and a direct comparison between them and the reported prices.

*Prices collected directly by the Commission.*—Price information was taken directly from the books of about 40 dealers by accountants and other representatives of the Commission covering transactions for a period of 10 days subsequent to each of six specific dates. These were January 1 and July 1, in 1917, and January 1, April 1, July 1, and October 1, in 1918. Prices at these dates were taken for 30 grades of old (used) rags and 16 grades of clips. The prices were taken directly from the sales and purchase books, together with the quantity involved in each transaction. A statement summarizing the prices obtained in this manner will be found in the Appendix (Exhibit XII).

The following table presents in comparative form the prices for 11 grades from the three sources, i. e., published prices, prices reported by dealers to the War Industries Board, and prices collected from dealers' records by the Federal Trade Commission agents. The

prices from the last two sources are included under the caption "Prices collected by the Federal Trade Commission," with a footnote to indicate those reported to the War Industries Board.

TABLE 3.—Comparison of prices from different sources, 1917 and 1918.

[All prices shown in cents per pound.]

Date.	Rough cloth rags.		Light cloth rags.		Light worsted rags.		Skirted delaines rags.	
	Prices from published sources.	Prices collected by Federal Trade Commission.	Prices from published sources.	Prices collected by Federal Trade Commission.	Prices from published sources.	Prices collected by Federal Trade Commission.	Prices from published sources.	Prices collected by Federal Trade Commission.
January, 1917.....	5.63	5.25	9.00	5.00	13.25	11.00	4.25	4.00
July, 1917.....	5.38	5.00	9.50	5.75	13.50	11.75	4.06	3.38
January, 1918.....	5.50	5.25	9.50	9.50	15.00	14.38	4.13	3.00
April, 1918.....	5.88	5.88	8.50	9.50	16.00	17.25	4.12	4.00
July, 1918.....	8.50	8.00	13.12	11.13	22.50	19.50	4.75	5.00
October, 1918.....	8.75	8.88	13.12	13.50	22.50	22.25	6.50	6.00
July-September, 1918.....	8.75	.....	13.12	<sup>1</sup> 12.75	22.50	<sup>1</sup> 21.50	5.50	<sup>1</sup> 5.00

Date.	Mixed soft rags.		Blue serge rags.		Fine merchant tailor clips.		Black worsted clips.	
	Prices from published sources.	Prices collected by Federal Trade Commission.	Prices from published sources.	Prices collected by Federal Trade Commission.	Prices from published sources.	Prices collected by Federal Trade Commission.	Prices from published sources.	Prices collected by Federal Trade Commission.
January, 1917.....	13.25	12.00	18.50	16.25	23.50	19.00	35.50	37.50
July, 1917.....	13.25	12.25	16.50	13.25	21.50	21.00	33.75	40.00
January, 1918.....	14.00	12.50	16.50	16.00	25.00	26.50	43.75	42.50
April, 1918.....	15.75	14.88	16.50	17.25	26.00	27.50	43.75	43.50
July, 1918.....	21.00	19.75	21.50	20.63	33.00	38.50	52.00	56.00
October, 1918.....	21.50	22.75	21.50	21.63	38.00	37.00	65.00	61.50
July-September, 1918.....	21.50	<sup>1</sup> 20.50	21.50	<sup>1</sup> 20.75	35.83	<sup>1</sup> 39.00	58.17	<sup>1</sup> 56.60

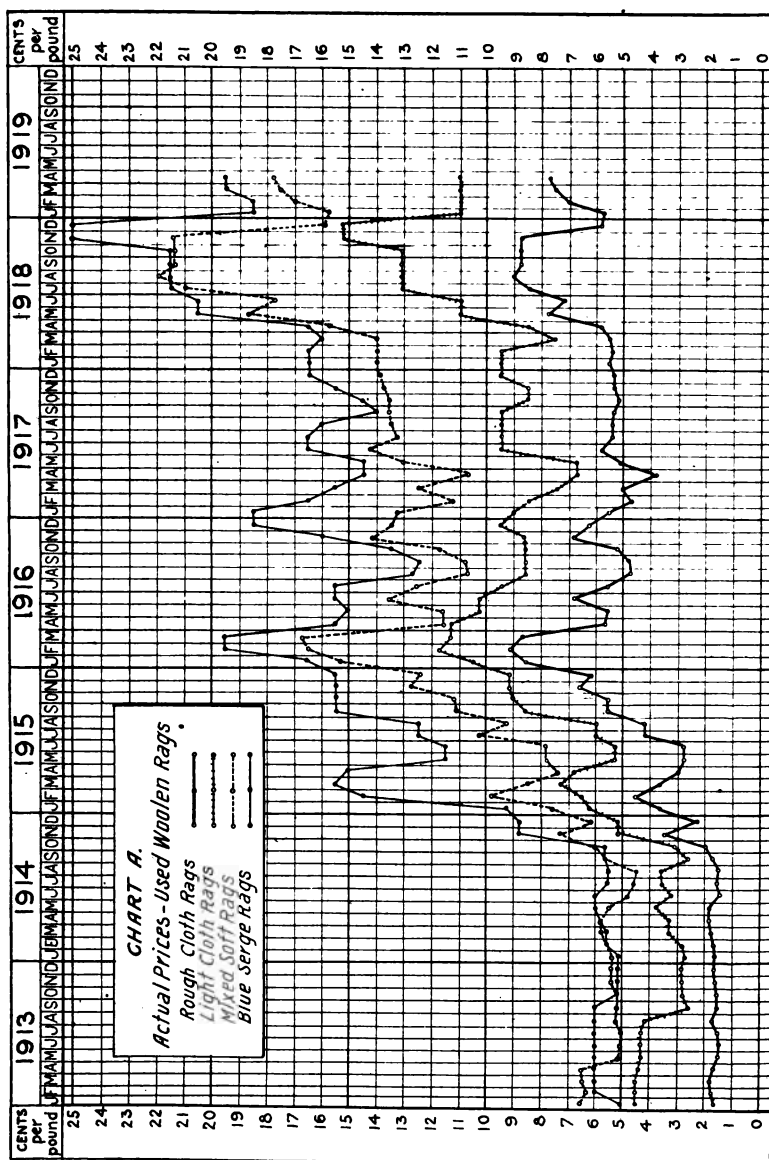
Date.	Blue worsted clips.		Blue serge clips.		White serge clips.	
	Prices from published sources.	Prices collected by Federal Trade Commission.	Prices from published sources.	Prices collected by Federal Trade Commission.	Prices from published sources.	Prices collected by Federal Trade Commission.
January, 1917.....	34.50	36.00	23.50	27.50	29.00	36.00
July, 1917.....	32.25	37.00	27.50	30.00	.....	42.50
January, 1918.....	42.50	44.00	36.50	39.50	46.50	47.50
April, 1918.....	41.50	41.75	36.50	41.00	46.50	52.50
July, 1918.....	56.50	55.25	48.00	50.50	53.50	63.50
October, 1918.....	62.00	60.50	50.00	49.75	70.00	67.50
July-September, 1918.....	59.83	<sup>1</sup> 56.50	49.67	<sup>1</sup> 47.50	60.17	<sup>1</sup> 57.50

<sup>1</sup> Prices reported to War Industries Board.

It will be seen from the foregoing comparison that almost all of the prices obtained from these different sources are in substantial agreement. Therefore, the series of price statistics derived from

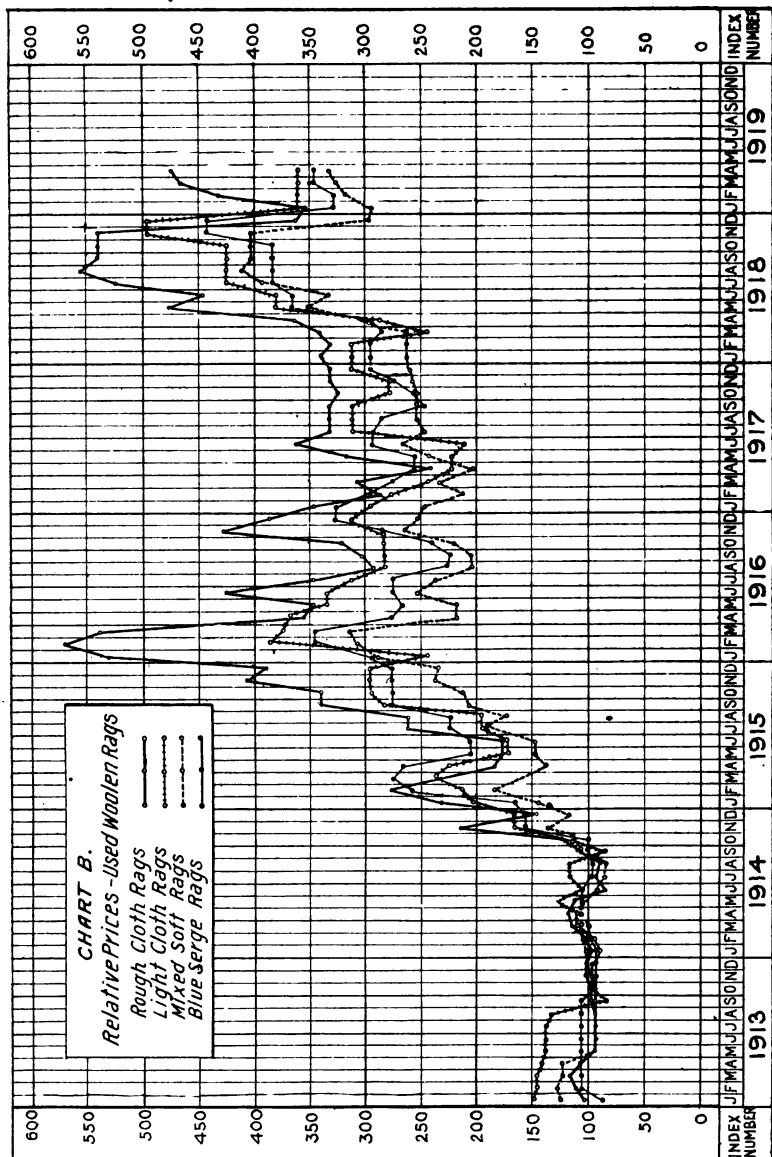
published sources can be accepted as showing, with reasonable accuracy, price movements throughout the period covered by them.

*Discussion of price information.*—The course of prices of "Rough cloth" rags, "Light cloth" (one of the principal grades obtained in



sorting "Rough cloth"), "Mixed softs," and "Blue serge" (one of the principal grades obtained in sorting "Mixed softs") is shown in graphic form on charts A above and B (on p. 32). Chart A shows the actual prices, and B the relative prices.

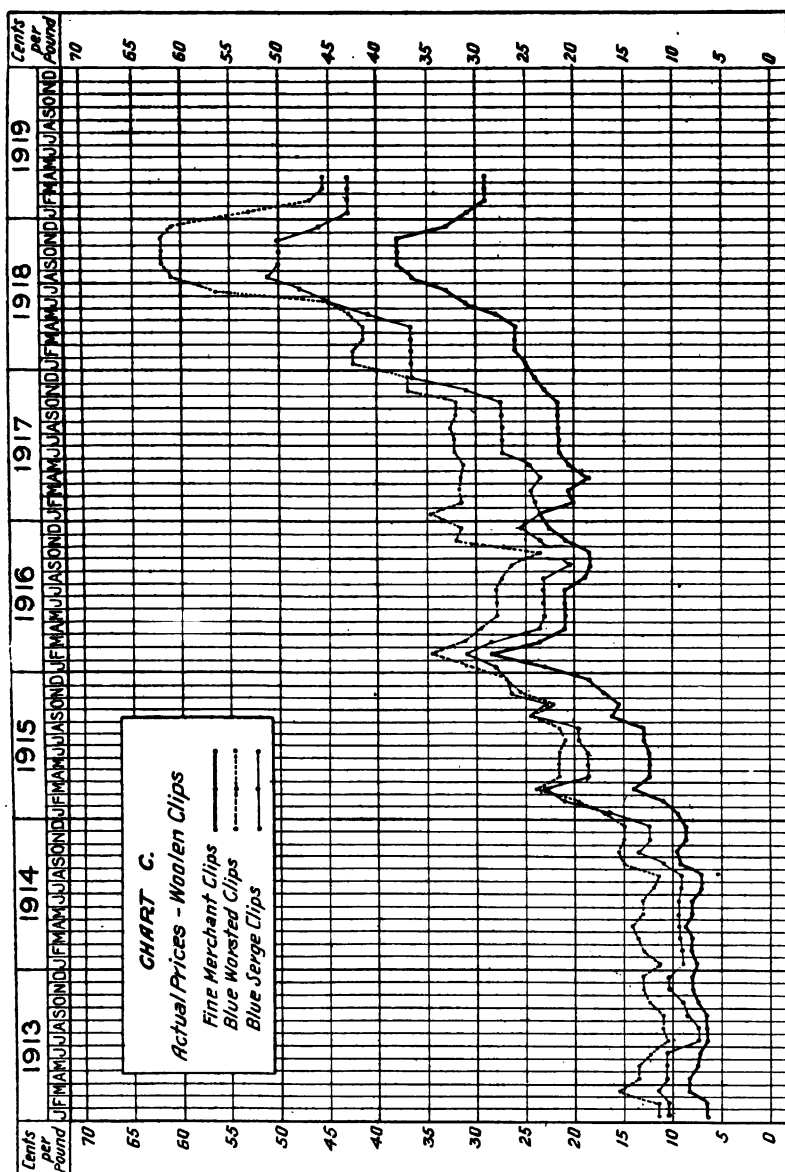
Chart A shows that, as far as price levels are concerned, "Rough cloth" is the lowest-priced grade and "Blue serge" the highest. Chart B shows, however, as far as relative advance of prices is concerned, that prices of "Rough cloth" have advanced far out of pro-



portion to the other grades, and that next came "Light cloth," which is one of the grades derived from "Rough cloth."

Charts A and B bring out clearly the recovery of the prices on "Rough cloth" rags, and to a less degree of the prices on "Mixed soft"

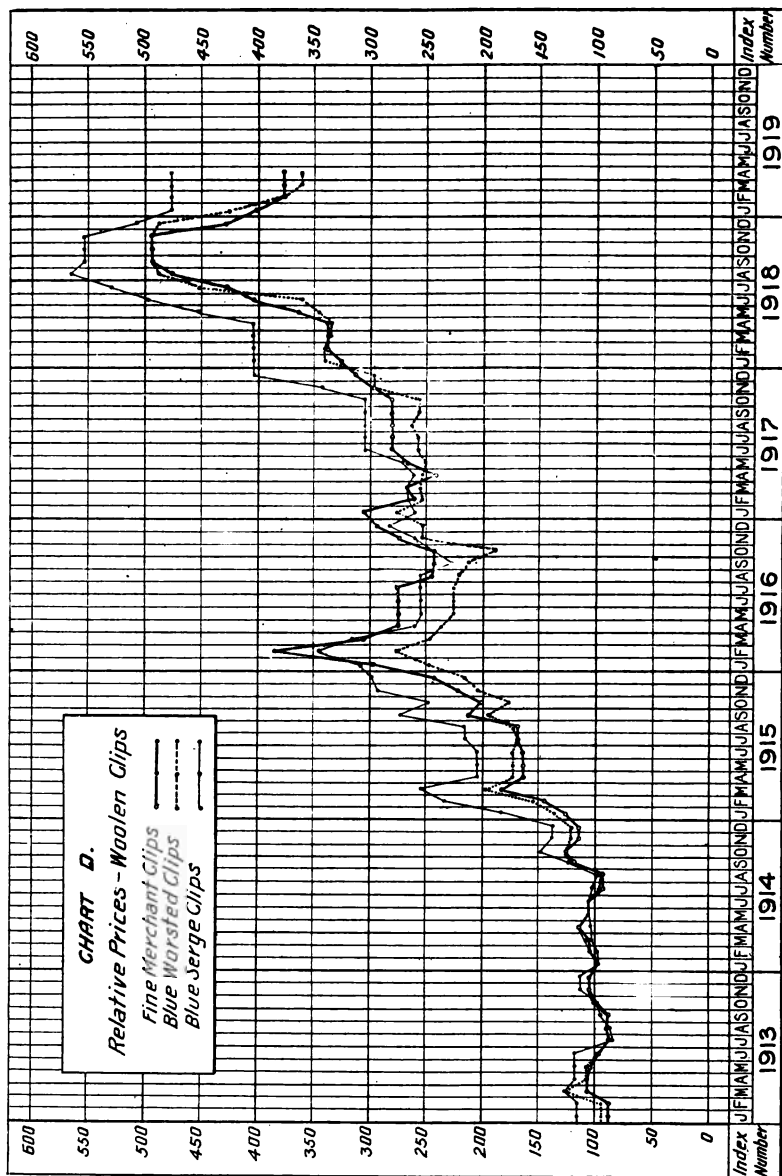
rags, from the low levels reached in December, 1918, and January, 1919, the months immediately following the Armistice. A large part of this rise during February-April, 1919, is attributable to the resumption of exports (see p. 51). It will be noted that the prices of "Blue



serge" rags were but slightly affected and those of "Light cloth" rags not at all.

Charts C and D show in graphic form the prices of "Fine merchant tailor" clips and of "Blue serge" clips and "Blue worsted" clips

(two of the principal grades obtained from "Fine merchant tailor" clips). It will be noted by chart D that "Blue serge" clips had the greatest relative advance in prices, and that "Blue worsted" clips, the highest-priced grade, had about the same relative advance as



"Fine merchant tailor" clips. It should be noted that there was no recovery in the prices of clips from the drop following the Armistice, the course of prices differing materially in these instances from those for "Rough cloth" rags and "Mixed soft" rags shown on Charts A and B.

The prices of used rags and of clips are limited at the top by the current price of new wool. While certain grades of shoddy may be higher priced than certain grades of new wool, all other things being equal, shoddy does not command as high a price as new wool. From an economic standpoint, it is not the equal of new wool. The price at which the shoddy manufacturer can market his output limits the price which he is in a position to pay for the rags to be manufactured into shoddy. It follows that the top prices of rags are absolutely limited by current top prices on the shoddy manufactured from the rags.

On the other hand, there is a bottom price, particularly with respect to old rags, below which prices can not go, if production is to continue. The woolen-rag dealer, as distinguished from the peddler who collects rags in the first place, purchases his commodity from the dealer in "Mixed country rags." That is the source out of which old woolen rags come. The price of "Mixed country rags" depends in part on the price obtained for the other components of "Mixed country rags" other than woolen materials. The two commodities, "Rough cloth" and "Soft woollens" (derived from "Mixed country rags"), in themselves constitute the basis on which the woolen-rag trade is built up. It follows that the prices prevailing on "Rough cloth" and "Soft woollens" furnish a barrier below which the woolen-rag sorter or grader can not go and still operate his business at a profit. Thus, the prices of these two basic classifications of old rags are influenced both by the prices of "Mixed country rags" (from which they are derived) and also by the prices of the grades into which they themselves are subdivided. Any but a slight change in the prices on graded rags invariably results in a change in the prices of "Rough cloth" and "Soft woollens."

With respect to clips, the same holds true with the exception that the bottom barrier is more elastic. The vendors of ungraded clips are the clothing house manufacturers and merchant tailors. Until recent years, not much attention was paid by such concerns to this by-product as a regular source of business income. In many instances the money obtained was allowed to be the perquisite of some foreman or manager and was never turned in to the firm. To-day, it is not only an item taken into consideration as a part of the dealer's regular receipts from his business, but in a large number of instances the value of the clippings is taken into consideration in figuring the price of making garments. The basic selling price of the collector must of course be one which would permit the profitable collection. Intimately bound up with this is the attitude of the vendor. If he does not care to sell his clips at the price offered, he may seek to dispose of the material himself—even, sometimes, first partly sorting it instead of selling it to the collector who calls



to purchase it. These factors place a limit on the bottom price of clips. The factors which determine the rise and fall in the prices of clips are virtually the same as those already described in connection with used woollen rags. It is necessary, however, to keep in mind the fundamental distinction that unused fabrics made of wool will contain more wool suitable for shoddy purposes than the same fabrics after they have become worn. Therefore, for corresponding grade the clip is invariably higher in price than the used rag. The ratio of price varies with the different fabrics. The difference in price is less when the fabric contains cotton, silk, etc., which has to be removed during the conversion into shoddy.

The following table shows a comparison between the price of blue serge used rags and blue serge clips over a period of years:

TABLE 4.—Comparison of the prices of "Blue serge" rags and "Blue serge" clips, 1913-1918.

Period.	1913			1914			1915		
	Rags.	Clips.	Differ- ential.	Rags.	Clips.	Differ- ential.	Rags.	Clips.	Differ- ential.
January-March.....	Cents. 5.67	Cents. 10.83	Cents. 5.16	Cents. 5.45	Cents. 9.08	Cents. 3.63	Cents. 13.08	Cents. 20.17	Cents. 7.09
April-June.....	6.00	10.75	4.75	6.00	9.34	3.34	12.67	18.50	5.83
July-September.....	6.00	7.96	1.96	5.54	9.71	4.17	13.50	21.17	7.67
October-December.....	5.12	9.83	4.71	7.78	12.83	5.05	15.50	25.33	9.83
Year.....	5.70	9.84	4.14	6.19	10.24	4.05	13.69	21.29	7.60

Period.	1916			1917			1918		
	Rags.	Clips.	Differ- ential.	Rags.	Clips.	Differ- ential.	Rags.	Clips.	Differ- ential.
January-March.....	Cents. 18.50	Cents. 29.17	Cents. 10.67	Cents. 16.83	Cents. 23.92	Cents. 6.09	Cents. 16.33	Cents. 36.50	Cents. 20.17
April-June.....	15.33	23.17	7.84	15.17	25.17	10.00	19.17	40.83	21.66
July-September.....	13.58	22.17	8.59	15.50	27.50	12.00	21.50	49.67	28.17
October-December.....	16.00	24.50	8.50	15.50	31.67	16.17	23.83	48.67	24.84
Year.....	15.85	24.77	8.92	15.75	27.06	12.31	20.21	43.92	23.71

The lowest differential shown for any one quarter is 1.96 cents in July-September, 1913, and the greatest difference 28.17 cents in July-September, 1918. The average yearly differential increased from 4.14 cents in 1913 and 4.05 cents in 1914 to 23.71 cents in 1918. In 1913, the average rag price was 58 per cent of the clip price, in 1914 it was 60 per cent, in 1915 and 1916, 64 per cent, in 1917, 58 per cent, and in 1918 it dropped to 46 per cent.

From the foregoing statistics it is obvious that the relation between the prices of blue serge rags and blue serge clips has varied greatly during the past six years.

## 2. Costs and earnings information obtained.

*Costs of operation.*—The Commission was able to secure financial costs in the desired comparable shape, covering the operations of nine firms for four years, and of three additional firms for three years. The dates of the latest closing of books were December 31, 1917, in nine instances, and March 31, 1918, May 30, 1918, and June 30, 1918, respectively, in the case of three firms. In compiling the composite statements herewith presented, no attempt has been made to secure exact comparability of the periods grouped, by adjusting or prorating through some theoretical method, the slight differences, but in each case where the periods did not correspond with the calendar years they have been treated as falling in the calendar year to which they virtually belonged.

The conditions brought about by the Armistice made it unnecessary for the Federal Trade Commission to examine the financial records for these companies for 1918. Such an examination would have had to be postponed until about February, 1919, since until then the books would not generally have been ready for examination, and it was felt that the necessity for such information, in view of the existing situation, did not warrant either the expense to the Government or the inconvenience to the firms whose records were examined.

The combined figures for the principal elements in the cost of operation for the nine firms for which *four*-year records were obtainable are as follows:

TABLE 5.—*Costs of operation of 9 firms, 1914–1917.*

	1917	1916	1915	1914
Cost of raw materials.....	\$13,444,920	\$12,927,982	\$8,911,408	\$4,667,464
Sorting and handling of materials:				
Labor.....	649,686	485,001	329,054	271,224
Expense.....	188,361	143,156	121,822	109,010
Administration and selling expense.....	821,518	606,068	478,381	423,541
Total.....	15,104,485	14,162,207	9,840,665	5,471,239

The proportion which each of these items forms of the total expense is shown in the following table:

TABLE 6.—*Percentage relation of cost items to total cost of operation of 9 firms, 1914–1917.*

	1917	1916	1915	1914
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Cost of raw materials.....	89.1	91.3	90.6	85.2
Sorting and handling of materials:				
Labor.....	4.3	3.4	3.3	5.0
Expense.....	1.2	1.0	1.2	2.0
Administration and selling expense.....	5.4	4.3	4.9	7.8
Total.....	100.0	100.0	100.0	100.0

Similar combined amounts and percentages for the 12 firms (including the nine just mentioned) for which *three-year* records were obtainable are as follows:

TABLE 7.—*Costs of operation of 12 firms, 1915-1917.*

	1917	1916	1915
Cost of raw materials.....	\$15,400,503	\$15,161,002	\$10,167,425
Sorting and handling of materials:			
Labor.....	783,636	635,843	409,497
Expense.....	228,429	172,623	135,957
Administration and selling expense.....	981,448	752,406	539,885
Total.....	17,384,016	16,721,874	11,252,764

The proportion which each of these items forms of the total expense is shown in the following table:

TABLE 8.—*Percentage relation of cost items to total cost of operation of 12 firms, 1915-1917.*

	1917	1916	1915
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Cost of raw materials.....	88.6	90.7	90.4
Sorting and handling of materials:			
Labor.....	4.5	3.8	3.6
Expense.....	1.3	1.0	1.2
Administration and selling expense.....	5.6	4.5	4.8
Total.....	100.0	100.0	100.0

The average proportions for the respective four-year and three-year periods are as follows:

	1914-1917, 9 firms.	1915-1917, 12 firms.
	<i>Per cent.</i>	<i>Per cent.</i>
Cost of raw materials.....	89.6	90.0
Sorting and handling of materials:		
Labor.....	3.9	3.9
Expense.....	1.3	1.2
Administration and selling expense.....	5.2	4.9
Total.....	100.0	100.0

It will be noted that the addition of the three firms for whom records for only three years were obtained, while increasing the total cost figures for those years by about one-seventh (from \$39,134,347 for the 9 firms up to \$45,368,654 for the 12 firms) do not materially alter the proportions which the different subdivisions of cost form of the total cost. Therefore, the figures for the 9 firms shown for the longer period can be accepted as representative, and

the discussion of these various elements of cost will be based on the 1914-1917 figures.

The cost of raw material includes the cost, delivered at warehouse, of the rags bought. It includes besides the amount paid for the rags, any payments made for freight and cartage inward. The proportion which the cost of raw material formed of the total cost was lowest in 1914, being then about 85 per cent, and being around 90 per cent during each of the next three years. Reference to the tables and charts in this report showing prices of used rags and clips indicates, as the explanation of this increase in proportion, the generally higher prices of rags.

Under "Sorting and handling of materials," the item of labor includes all labor of handling, sorting, and baling of all the various grades within the plant or in warehouse. The proportion which the cost of labor formed of the total cost was lowest in 1915, being then 3.3 per cent and highest in 1914 (5 per cent). It was rising during the three years 1915-1917, reaching 4.3 per cent in 1917. The item of expense includes all charges such as insurance on stock, warehouse rent, power, heat, light, etc., in connection with the stock sold and on hand. The proportion which it formed of the total cost was highest (2 per cent) in 1914. It was about 1 per cent during the next three years.

Due to the lack of clear distinction in the original records in some cases between charges for administration expense and those for selling expense, the two are shown combined in the foregoing tables. Administration expense includes office clerks' salaries, stationery and printing, legal services, officers' salaries, etc. In every case the amount, if any, of officers' or partners' salaries paid during the period was obtained. Such salaries averaged 1.2 per cent of the total cost of operation, for the 9 firms whose records were obtained during the four-year period, and 1.2 per cent for the 12 firms (including the preceding 9), whose records were obtained during the three-year period. The selling expense includes freight and cartage inward, salesmen's salaries, commissions, etc. In the case of 6 firms for which records could be obtained for the four-year period, it was possible to secure a separation between administration and selling expense. The figures cover the sales amounting to \$28,736,411 during the four years, and show that for these 6 firms the administration expense was 2.8 per cent of the total cost, and the selling expense likewise was 2.8 per cent. Corresponding statistics for 8 firms (including the foregoing 6) for which records were obtained for three years, are 2.6 per cent for administration and 2.5 per cent for selling. The sales for the 8 firms amounted to \$29,337,028 during the three years.

*Relation of cost of operation to sales.*—The combined sales of the 9 firms for which records were obtained for the four-year period, 1914–1917, were as follows:

1914.....	\$6,007,296
1915.....	11,404,248
1916.....	15,690,138
1917.....	16,092,719
Total.....	49,194,401

The combined sales of the total 12 firms (including that of the 9 just mentioned) for which three years' records were obtained was as follows:

1915.....	\$13,044,232
1916.....	18,383,900
1917.....	18,521,463
Total.....	49,949,595

In the following table are shown the combined annual sales of the 9 firms for which records were available for four years, the cost of operation, and the proportion of the amount received from sales which was absorbed by the cost:

TABLE 9.—*Relation of sales to cost of operation, of 9 firms, 1914–1917.*

Year.	Sales.	Cost.	Per cent.
1914.....	\$6,007,296	\$5,471,239	91
1915.....	11,404,248	9,840,665	86
1916.....	15,690,138	14,162,207	90
1917.....	16,092,719	15,104,485	93

Similar statistics for the 12 firms (including the 9 just referred to) for which records for three years were available are as follows:

TABLE 10.—*Relations of sales to cost of operation, of 12 firms, 1915–1917.*

Year.	Sales.	Cost.	Per cent.
1915.....	\$13,044,232	\$11,252,764	86
1916.....	18,383,900	16,721,874	91
1917.....	18,521,463	17,394,011	94

It will be noted that the proportion of cost to sales was lowest in 1915 (86 per cent) and that it increased each subsequent year, reaching, in 1917, 93 per cent in the case of the 9 firms, and 94 per cent in the case of the 12 firms.

*Investment.*—For the purposes of this report the investment was determined by taking the total assets directly employed in the business, less the current liabilities. The combined investment of

the 9 firms for which records were obtained for the four-year period 1914-1917, was as follows:

Jan. 1, 1914.....	\$1,580,454
Jan. 1, 1915.....	2,227,535
Jan. 1, 1916.....	3,690,286
Jan. 1, 1917.....	5,176,887
Jan. 1, 1918.....	5,445,610

It will be noted that there was a rapid rise from January 1, 1914, to January 1, 1917, but that during 1917 there was little increase. The combined investment of the total 12 firms (including that of the 9 just mentioned) for which three-years' records were obtained was as follows:

Jan. 1, 1915.....	\$2,472,542
Jan. 1, 1916.....	4,176,216
Jan. 1, 1917.....	5,726,434
Jan. 1, 1918.....	5,996,012

*Relation of net earnings to investment.*—For the purposes of this report the net earnings were taken as the net sales less costs of operation as described above. Interest, federal taxes, and other such financial items were not deducted. In the following table are shown the combined investment at the beginning of each year, of the 9 firms for which it was possible to secure records for four years, the net earnings for each year, and the percentage which the net earnings bore to the investment:

TABLE 11.—*Relation of net earnings to investment of 9 firms, 1914-1917.*

Year.	Investment at beginning of year.	Net earnings.	Per cent.
1914.....	\$1,580,454	\$536,057	34
1915.....	2,227,535	1,563,583	70
1916.....	3,690,286	1,527,931	41
1917.....	5,176,887	988,234	19

Similar statistics for the *twelve* firms (including the nine just referred to) are as follows:

TABLE 12.—*Relation of net earnings to investment of 12 firms, 1915-1917.*

Year.	Investment at beginning of year.	Net earnings.	Per cent.
1915.....	\$2,472,542	\$1,791,468	72
1916.....	4,176,216	1,662,026	40
1917.....	5,726,434	1,127,452	20

It will be noted from the above tables that the per cent of net earnings to investment was highest in 1915, being 70-72 per cent, and lowest in 1917, being 19-20 per cent.

*Relation of sales to investment (annual rate of turnover).*—In the following tables are shown the relation of sales to investment (sometimes known as the "annual rate of turnover"). The statistics for the 9 firms for which records for four years were available are as follows.

TABLE 13.—*Relation of sales to investment of 9 firms, 1914-1917.*

Year.	Investment at beginning of year.	Sales during year.	Rate of turnover.
1914.....	\$1,580,454	\$6,007,296	3.8 times.
1915.....	2,227,535	11,404,248	5.1 times.
1916.....	3,690,286	15,690,138	4.3 times.
1917.....	5,176,857	16,092,719	3.1 times.

Similar figures for the 12 firms (including the above 9) for which records for three years were available are as follows:

TABLE 14.—*Relation of sales to investment of 12 firms, 1915-1917.*

Year.	Investment at beginning of year.	Sales during year.	Rate of turnover.
1915.....	\$2,472,542	\$13,044,232	5.3 times
1916.....	4,176,216	18,383,900	4.4 times.
1917.....	5,726,434	18,521,463	3.2 times.

*Relation of annual rate of turnover to annual rate of earnings.*—The correlation between the decrease in rates of earnings and rate of turnover is clearly seen in the following table:

TABLE 15.—*Relation of annual rate of turnover to annual rate of earnings.*

Year.	Nine firms.		Twelve firms.	
	Rate of earning.	Rate of turnover.	Rate of earning.	Rate of turnover.
	<i>Per cent</i>		<i>Per cent</i>	
1914.....	34	3.8 times.....	72	5.3 times.
1915.....	70	5.1 times.....	40	4.4 times.
1916.....	41	4.3 times.....	20	3.2 times.
1917.....	19	3.1 times.....		

It will be noted that the increase of the investment in the business, necessitated mainly by the greatly higher cost of the raw materials (used rags and clips) resulted in cutting down the annual rate of turnover possible on a given amount of investment. This in turn affected the annual rate of earnings on the investment.

### 3. Classification of grades and names of used rags and clips.

*The confusion due to lack of definite and accepted standards.*—At the very outset of its investigation, the Commission found a state of confusion in the trade, as to the precise nature of the materials that should be included under the various grades, and as to the names of the grades.

The general unit covering transactions in both new and old rags is a bale. Bales vary in weight between four hundred and a thousand pounds; each bale is made up of hundreds of pieces of material. In new rags the pieces run in small squares or little strips of irregular shape, many as small as two inches square. In old rags the pieces vary from half a foot to several feet square. The pieces which go to make up the bale do not come from a single source but have been gathered from various places. This is especially true in the case of a bale containing finely graded rags. While the bale may be called by the name of the kind of rags of which it is chiefly composed, there is no regularly accepted standard of contents or quality. Thus, two bales called by the same name may vary widely in their actual contents. There are no rules or customs which govern the make-up of a bale of rags and which provide that it shall contain certain things and shall not contain certain other. In the present-day rag trade a bale of rags said to contain rags of a given grade has no exact duplicate in the trade, and an order placed for 100 such bales, one from each of 100 dealers would bring together 100 bales which at best would only approximately resemble each other. Furthermore, a bale of rags derives its value from the uses to which it can be put in the manufacture of shoddy. If a bale of "White knits" be converted into shoddy and mixed with white cloth or pieces of dark cloth, it will adversely affect the shoddy produced from the bale. The result is that a bale of "White knit" rags loses its real commercial value unless it is what it purports to be and has been freed of other fabrics which would damage the shoddy. What holds the rag dealer to his grades is the fact that his sales are subject to rejection and that the good-will of his business rests upon the extent to which he actually supplies the grades that he purports to sell. But in the trade to-day, there is no "perfect packing" as it is called by dealers. All packings are merely approximations—no accepted standardization exists. This fundamental situation, moreover, is complicated by disadvantages of a more elementary character which could be readily enough minimized, even though the perfect standardization might not be practicable.

These are, primarily, twofold. First, the lack of standards in packing results in the production of a number of packings, which are usually known as distinct grades being dealt in under a common grade name, instead of under their usual trade names. For example,



such kindred grades as "Red softs," "Red knits," "Red flannels," and "Red serges" are packed with such lack of observance of the distinctions between them that the names are often used interchangeably. Technically and accurately, if the bale represents a mixture of "Red knits," flannels and serges it should be designated as "Red softs" (mixed). A preponderance of serge rags in a bale should not entitle the bale to be designated as "Red serge" although that is frequently done. The result is that a dealer himself scarcely knows when a bale which he has in hand is really "Red serge" or "Red knit" or "Red flannel," or actually "Red softs." This difficulty occurs in far more frequent and complicated form amongst the classes and grades of "New woolen clips" which are considerably more varied than the grades of old rags. When it is realized that the grade of "Fine dark cloth" and "Worsted clips" can contain precisely the same material as "Dark worsteds"; that the grade "Fine light cloth and worsteds mixed" can contain black and white and also tan colors and yet that the black and white and the tan colors can each constitute separate grades and are actively dealt in as such, it will be understood that the careless use by dealers of the names applied by them to the grades they are handling, leads to much confusion. Thus different grades which are very much alike are easily confused and improperly designated.

In the second place there is an additional confusion due to the fact that in some instances, a particular grade may be known by two or three names having no similarity to each other whatsoever. A stock illustration is that the grade of "Old knits" known as "Dark hoods" bears also the trade designations of "Fancy knits" and "Comforters." In everyday parlance in the trade, furthermore, abbreviations are used which are absolutely incomprehensible to the dealers themselves unless they have at hand the material to which the abbreviated designations relate. Thus, the term "Fine lights" could apply to both a new rag and an old rag and to several grades of each. The confusion in the trade in this respect made its reports to the War Industries Board often, at first, unintelligible.

As soon as the Government, through the War Industries Board, established a regulation of prices in the trade, it became essential for the purpose of establishing a basis upon which the industry as a whole might be dealt with, that the features above referred to be remedied as far as possible, and that the trade be placed on a basis where both the dealers and the Government might know definitely what was to be the grading of the commodities handled by the trade and by what names the grades were to be known.

There were not only unnecessary, illogical and ill-applied names of grades current in the trade, but there were also certain more or less obsolete groupings or packings of rags which could be used to

better advantage in making certain grades which had a definite use and market.

*The classification compiled by the Federal Trade Commission.*—An attempt has been made to present a complete classification of all grades which must be taken into consideration in the rag trade, without omitting any essential, reasonably required, grade; and to give each grade a definite, clear, unambiguous name which of itself carries a definition of the precise nature of the fabric to be included, and yet is sufficiently exclusive to prevent the inclusion of other fabrics. The object has been twofold; to make each grade, thus selected, so definite that a price could be placed upon it based on known information as to the value of the product for commercial purposes, and also to prevent the sale of a commodity under a wrong grade name. Special care has been taken in the arrangement and selection of terms with a view to making a completely uniform, logical and clear classification.

This classification while in itself required as a basis for the conducting of the inquiry by the Federal Trade Commission, likewise presented the one immediate basis which permitted of the establishment and enforcement of fundamental regulations with respect to the trade. It was revised in cooperation with the War Industries Board, by whom the list was to have been used. That Board, through its chief of woollens section, Mr. Herbert E. Peabody, had selected for this, among other purposes, Mr. D. Morley Lodge, a dealer in the trade located in Boston, Mass. Mr. Lodge made a careful revision of this list. This revised classification which is presented in this report, is one of the fundamental steps taken by the Commission toward the supplying of requisite data for the establishment and enforcement of prices on woollen rags. It was informally decided that this list should be used in establishing future prices on rags. The complete classification is to be found in the Appendix (Exhibit XIII) and an outline of its chief subdivisions is presented herewith.

*Summary of main classifications of woollen rags.*

Old woollen rags:

Mixed country rags.

Soft woollens—

Ungraded soft woollens.

Graded soft woollens.

Hard woollens—

Rough cloth.

Skirted cloth

Carpets.

Felts.

Haircloths.

Linseys.

Seams.

**New woolen rags:****New woolen clips ungraded—**

Miscellaneous cuttings of wool and straight cotton materials, mixed.

Men's wear.

Women's wear.

Carriage and auto clips.

Felts.

**Headings ungraded.****Graded clips and headings—**

Mixed materials.

Straight materials—

Bunting.

Cheviots.

Flannels.

Delaines (including alpaca).

Homespun.

Kerseys.

Mackinaws.

Palm beach.

Serges.

Uniform materials.

Unions.

Worsted.

Miscellaneous additional materials.

*The application of a standard classification to the trading in ungraded rags and clips.*—As has already been pointed out, the used woolen rags when first collected are obtained from "Mixed country rags," which yield on the average from 20 to 30 per cent of their weight in woolen rags. The used woolen rags are first sorted into general classifications, of which the principal ones are "Soft woolens" (sometimes called "Mixed softs"), and "Hard woolens," known in the trade as "Rough cloth." These are the two large groups and further subjected to elaborate classification and grading.

While in some instances clips are collected in such shape as to require little or no further subclassification and grading, in other cases the first collection results in the accumulation of clips of many different kinds. These are known as "Ungraded clips," and like the "Soft woolens" and "Rough cloth" classes of used rags, are subjected to further classification and grading.

*Old rags.*—It is evident that the value of any collection either of "Soft woolens," of "Rough cloth," or of "Ungraded clips" will depend greatly on the proportion of the more desirable grades which it will yield, and that the price paid for such a collection will bear some relation to its supposed content of the higher priced grades. There has been no recognized standard of the relative proportions of the high and low value grades which could be expected from any particular collection of "Soft woolens," "Rough cloth," or "Ungraded clips." It varies greatly according to locality and to the practice of the individual packer. There has

been constant complaint in the trade on the part of the buyers that when certain grades were in demand at good prices, the packer put a much smaller proportion of such grades into his "pack" of "Soft woollens," "Rough cloth," or "Ungraded clips," and sold the balance which he had collected at a much higher price than he would otherwise get for them. As a result of the personal equation certain packers who have a high reputation for the character of their "pack" regularly receive prices for their mixed collections substantially above what other packers in the same localities receive for rags sold under a similar title.

An illustration of the differences in the value between one lot of ungraded rags and another, both of which would come under the same general class and be sold at the same price, is afforded in the following comparison for "Skirted cloth" derived from "Rough cloth." The lot designated as "A" shows the proportions of "Skirted cloth," which was derived from a test made of 91,696 pounds of "Rough cloth," the price of which was taken as 8½ cents. This produced 52,289 pounds of skirted cloth. The lot designated as "B" represents the judgment of one of the most experienced sorters in the trade as to the average he would expect to get when buying "Rough cloth." The prices per pound applied to the graded material are in each case those officially promulgated by the War Industries Board under date of August 19, 1918.

TABLE 16.—Comparison of "Skirted" products obtained from a lot of "Rough cloth" with an expert's estimate of normal contents.

Grade.	Price per pound.	A.			B.		
		Pounds.	Per cent.	Value.	Pounds.	Per cent.	Value.
	<i>Cents.</i>						
Skirted satinetts.....	4	212	0.4	\$8.48	2	2	\$0.08
Dark skirted cloth.....	8½	5,195	9.9	441.57	13	13	1.14
Black skirted cloth.....	10	6,181	11.9	618.10	12	12	1.20
Blue skirted cloth.....	10	2,396	4.6	239.60	7	7	.70
Brown skirted cloth.....	10	1,869	3.6	186.90	2	2	.20
Skirted cloth (from mixed rags).....	10	688	1.3	68.80			
Fine black skirted cloth.....	12	68	.1	8.16			
Light skirted cloth.....	15½	4,915	9.4	761.83	16	16	2.48
Black and white skirted cloth.....	17	1,577	3.0	268.09			
Dark skirted worsteds.....	17	8,534	16.4	1,450.78	16	16	2.72
Fine light skirted cloth.....	18½	1,915	3.7	354.28			
Blue skirted worsteds.....	21	6,870	13.2	1,442.70	14	14	2.94
Black skirted worsteds.....	22	4,167	7.9	916.74	4½	4½	.99
Brown skirted worsteds.....	23	2,418	4.6	556.14	5½	5½	1.26
Light skirted worsteds.....	25	4,050	7.7	1,012.50	7	7	1.75
Tan skirted cloth.....	25	1,234	2.3	308.50	1	1	.25
Total.....		52,289	100.0	8,643.17	100	100	15.71
Average value (cents per pound).....				16.5			15.7

The following table shows the proportion and values of the total products obtained from the 92,727 pounds of "Rough cloth" which produced the "Skirted" cloth shown under "A" in the preceding table.

TABLE 17.—All products obtained from a sample lot of "Rough cloth."

Grade.	Price per pound.	Pounds.	Per cent.	Value.
<i>Skirted cloth:</i>				
	<i>Cents.</i>			
Skirted satinet.....	4	212	0.2	\$8.48
Dark skirted cloth.....	8½	5,195	5.7	441.57
Black skirted cloth.....	10	6,181	6.6	618.10
Blue skirted cloth.....	10	2,396	2.6	239.60
Brown skirted cloth.....	10	1,869	2.0	186.90
Skirted cloth (from mixed rags).....	10	688	.7	68.80
Fine black skirted cloth.....	12	68		8.16
Light skirted cloth.....	15½	4,915	5.3	761.83
Black and white skirted cloth.....	17	1,577	1.7	268.09
Dark skirted worsteds.....	17	8,534	9.2	1,450.78
Fine light skirted cloth.....	18½	1,915	2.1	354.28
Blue skirted worsteds.....	21	6,870	7.7	1,442.70
Black skirted worsteds.....	22	4,167	4.6	916.74
Brown skirted worsteds.....	23	2,418	2.6	556.14
Light skirted worsteds.....	25	4,050	4.4	1,012.50
Tan skirted cloth.....	25	1,234	1.3	308.50
<i>Other products:</i>				
Strippings.....	3½	34,050	36.5	1,106.62
Rough satinet.....	3½	1,124	1.2	36.53
Rough vests.....	4½	317	.3	14.26
Wool bodies.....	8½	1,167	1.3	102.10
Tare.....	8½	2,749	2.9	240.53
Shrinkage.....		1,031	1.1	
Total.....		92,727	100.0	10,143.21
Average value (cents per pound).....				10.9

A comparison made for grades derived from a lot of "Mixed softs" (A) containing 86,055 pounds, with (B) an expert's estimate of the normal contents of "Soft woollens," is shown in the following table:

TABLE 18.—Comparison of graded products derived from a lot of "Soft woollens" with an expert's estimate of normal contents.

	Price per pound.	A.			B.		
		Pounds.	Per cent.	Value.	Pounds.	Percent.	Value.
	<i>Cents.</i>						
Small merinos.....	9	286	0.4	\$25.74			
Light gray.....	16	2,567	3.4	410.72	5	5.0	\$0.80
Coarse dark merinos with serges.....	16	7,166	9.5	1,146.56	11	11.0	1.76
Blue flannels.....	18	465	.6	83.70			
Fancy knit.....	21	2,299	3.0	482.79	3		.63
Red sorts.....	21½				3½	3.5	
Black serges.....	22	7,572	10.0	1,665.84	14	14.0	.75
Coarse light merinos with serges.....	24	9,733	12.9	2,335.92	13	13.0	3.12
Red flannels.....	24	904	1.2	216.96			
Blue serges.....	25	9,198	12.3	2,299.50	12	12.0	3.00
Fine dark merinos.....	25	9,547	12.7	2,386.75	13	13.0	3.25
Black merinos.....	25	1,957	2.6	489.25			
Blue knits.....	26½	2,559	3.4	678.13	3	3.0	.79
Red knit.....	27½	3,164	4.2	870.10			
Red serges.....	28	1,058	1.4	296.24	1	1.0	.28
Black knit.....	30	2,385	3.1	715.50	2	2.0	.60
Green knit.....	30	6		1.80			
Light serges.....	32	963	1.2	308.16			
Brown serges.....	32	1,514	2.0	484.48	3½	3.5	1.12
Green serges.....	32	944	1.2	302.08	1½	1.5	.48
Fine light merinos.....	32	1,716	2.3	549.12	5	5.0	1.60
Brown knit.....	32	492	.6	157.44	2	2.0	.64
Light hoods.....	38	1,984	2.6	753.92	1½	1.5	.67
Gray knit.....	45	3,270	4.3	1,471.50	3	3.0	1.35
White flannels.....	50	1,653	2.2	826.50			
White sorts.....	52				3	3.0	1.56
White knit.....	56	2,211	2.9	1,238.16			
Total.....		75,613	100.0	20,196.86	100.0	100.0	22.30
Average value (cents per pound).....				26.			22.3

The following table shows the proportion and value of the total products obtained from the 86,055 pounds of "Mixed softs" which produced the graded products shown under "A" in the preceding table:

TABLE 19.—All products obtained from a sample lot of "Mixed softs."

Grade.	Price per pound.	Pounds.	Per cent.	Value.
<i>Graded products:</i>	<i>Cents.</i>			
Small merinos.....	9	286	0.3	\$25.74
Light gray underwear.....	16	2,567	3.0	410.72
Coarse dark merinos with serges.....	16	7,166	8.3	1,146.56
Blue flannels.....	18	465	.5	83.70
Fancy knit.....	21	2,299	2.7	482.79
Black serges.....	22	7,572	8.8	1,665.84
Coarse light merinos with serges.....	24	9,733	11.3	2,335.92
Red flannels.....	24	904	1.0	216.96
Blue serges.....	25	9,198	10.7	2,299.50
Fine dark merinos.....	25	9,547	11.1	2,386.75
Black merinos.....	25	1,957	2.2	489.25
Blue knit.....	26	2,559	3.0	678.13
Red knit.....	27½	3,164	3.7	870.10
Red serges.....	28	1,058	1.2	296.24
Black knit.....	30	2,385	2.8	715.50
Green knit.....	30	6		1.80
Light serges.....	32	963	1.1	308.16
Brown serges.....	32	1,514	1.8	484.48
Green serges.....	32	944	1.1	302.08
Fine light merinos.....	32	1,716	2.0	549.12
Brown knit.....	32	492	.6	157.44
Light hoods.....	38	1,984	2.3	753.92
Gray knit.....	45	3,270	3.8	1,471.50
White flannels.....	50	1,653	1.9	826.50
White knit.....	56	2,211	2.8	1,238.16
<i>Miscellaneous products:</i>				
Mixed linseys.....	4½	3,138	3.6	141.21
Voiles.....	8	137	.1	10.96
Wool bodies.....	8½	101	.1	8.84
Skirted cloth.....	10	2,793	3.2	279.30
Tare.....	21½	3,552	4.1	763.63
Yellow blankets.....	25	141	.2	35.25
Clips.....	32	165	.2	52.80
Shrinkage.....		415	.5	
Total.....		86,055	100.0	21,488.85
Average value (cents) per pound.....				25

It will be clear from the foregoing examples that the value of any particular lot of "Mixed softs," or "Rough cloth," will have only a general relation to that of some other lot, whether determined by the amount of skirted and graded rags obtained, or by the total value of all the product.

It will be necessary, therefore, should a standard classification of grading be adopted, to specify the proportions of the different grades which shall be contained in a standard collection of "Rough cloth," "Soft woollens" (Mixed softs), and to fix the price of any particular lot sold under those names, by the relation that the proportion of grades and the average total value per pound of its actual contents, determined by sampling, or after sorting, bears to the proportion of grades and average value of the standard. This method is similar to those in use by traders in wheat, cotton, and some other products of a similar nature, where the material is produced in ungraded form.

*New clips.*—New rags, or "clips," originate in an entirely different fashion from old rags. They are the product of two general classes of manufacture: The men's wear trade, usually designated as clothing

manufacturers and merchant tailors, and the women's wear trade, known as cloak and suit manufacturers. The product of the latter passes amongst the small collectors of cuttings from these houses by the term "Spring wear," or "Springs."

There is no standard of ungraded clips. They vary as the materials from which they are cut. Some clothing manufacturers use high grade materials, others, inferior grades, while others use both kinds, in varying proportions from time to time. Little or no attempt is made when cutting up to keep the more valuable cuttings from the inferior. The result is that on the whole the sorter makes only the most superficial kind of a separation of materials and the grader has to sort out carefully the specific grades which he sells to manufacturers of shoddy. There are many special packings of new clips arranged for the manufacture of special shoddies and it is the general situation that clips are much more finely subdivided and regraded than are worn rags. The shoddy manufacturers themselves also prepare special gradings and cull over usual gradings, to produce particular shoddy "specialties."

#### IV. EFFECT OF THE EXPORT OF WOOL RAGS ON THE DOMESTIC RAG MARKET.

Since the signing of the Armistice in November, 1918, the exportation of woolen rags from the United States has greatly increased. Brief consideration will be given, therefore, to the export of rags although this has heretofore been a minor feature in the trade.

Prior to 1912 exports of woolen rags were not separately reported by the Bureau of Foreign and Domestic Commerce, of the Department of Commerce. Since 1912, they have been separately reported. The following table has been prepared from the annual reports, and monthly summaries issued by that bureau:

TABLE 20.—*Exports of woolen rags, July 1, 1911–Sept. 30, 1919.*

Period.	Quantity.	Value.
<b>Fiscal year ending June 30—</b>	<i>Pounds.</i>	
1912.....	20,309,476	\$705,484
1913.....	27,774,332	923,184
1914.....	26,852,402	973,653
1915.....	24,784,622	1,388,934
1916.....	13,918,247	1,283,934
1917.....	13,671,472	1,629,130
1918.....	8,532,243	1,012,350
<b>Month of—</b>		
July, 1918.....	74,148	8,992
August, 1918.....	222,558	25,170
September, 1918.....	48,382	29,767
October, 1918.....	67,279	14,728
November, 1918.....	124,181	8,926
December, 1918.....	135,935	11,971
January, 1919.....	1,612,194	274,429
February, 1919.....	3,707,117	507,651
March, 1919.....	5,896,264	1,003,129
April, 1919.....	6,619,417	1,240,755
May, 1919.....	1,466,973	274,561
June, 1919.....	1,148,125	218,045
July, 1919.....	723,058	137,123
August, 1919.....	1,931,084	347,635
September, 1919.....	2,958,626	451,173

Prior to the war the United Kingdom received about 75 per cent, most of the balance going to Germany and Belgium. Since 1915, the United Kingdom and Canada have received about 90 per cent, most of the balance going to Japan and Brazil.

The War Trade Board, in one of its general instructions, issued September 24, 1917, in article 3, section 10, and confirmed in official announcements under October 4, and 10, 1917, placed an embargo on all wool products for the purpose of conserving wool and provided that only the following ten grades of woollen rags were to be regarded as subject thereto:

Coarse light merinos.	Old skirted blue serge.
Coarse dark merinos.	Old skirted blue worsted.
Fine light merinos.	Old skirted dark worsted.
Fine dark merinos.	Old skirted light worsted.
New khaki clippings.	Old khaki rags.

Shortly thereafter, on November 13, 1917, the War Trade Board placed a far more complete embargo on woollen rags by providing that the only grades for which export license would be granted (instead of the previous regulation barring export of a few grades only) would be the following five grades which represent material which can be used in manufacturing only—heavy, hard, dark materials which in ordinary times are not manufactured or used in this country. The five grades were: "New and old felts not woven," "Plain black cloth," "Plain dark cloth," "Plain blue cloth," and "Plain brown cloth." This provision continued in effect until August 14, 1918, at which time the War Trade Board issued a ruling that all exports of wool, covering thereby *all* woollen rags, were prohibited unless the products to be made of the exported goods were to be imported into the United States for its use.

The immediate effect of this ruling was a rush to export in August, 1918, followed by a marked decline in exports.

This was the status of the embargo on exports of woollen rags up to the time of the Armistice. On November 18, 1918, the embargo was lifted slightly to release four of the five above-mentioned grades; and on December 10, 1918, by article 29, part 2 of its general instructions, the embargo was lifted altogether.

From that date on up to the present time the exportation of rags has constituted the main source of activity in the woollen-rag market.

It is probable that a part of the rise in the prices of the "Best mixed soft" and "Rough cloth" and "Blue serge" grades of used rags may be due to the demand for export of those grades subsequent to the removal of the embargoes.

Separate statistics for the importation of woollen rags are not available. The table following shows the quantity and value of woollen rags and "flocks" imported.



TABLE 21.—*Imports of woolen rags, July, 1912–June, 1918.*

Period.	Quantity.	Value.
Fiscal year ending June 30—	<i>Pounds.</i>	
1913.....	110, 252	\$29, 324
1914.....	3, 911, 708	378, 006
1915.....	2, 156, 729	190, 331
1916.....	1, 372, 014	203, 752
1917.....	1, 639, 954	202, 778
1918.....	1, 121, 147	222, 529

Imports up to November 30, 1913, were subject to 10 per cent duty per pound. Since December 1, 1913, they have been admitted free of duty. The figures for the fiscal year of 1914 are as follows: July 1 to November 30, 1913, 22,238 pounds, valued at \$7,355; December 1, 1913, to June 30, 1914, 3,889,470 pounds, valued at \$370,651. The effect of the abolition of the duty is evident from a comparison of the imports for the first five months of that fiscal year with those of the last seven months. An examination of the course of woolen-rag prices, does not show any marked fall in domestic prices directly attributable to the increase of imports, though it is possible that there was some check to a possible tendency for prices to rise.

#### V. SUMMARY AND CONCLUSIONS.

Subsequent to the outbreak of the European War, heavy orders for woollens were placed by the Allies in the United States. The filling of these orders necessitated the use of unusually large quantities of shoddy (or reworked wool), mixed with new wool. Following the entrance of the United States into the war, the demand for woollens of every description was greatly increased.

Due to the needs of the Army, Navy, and Red Cross work for an adequate supply of woolen clothing the United States military authorities, working in cooperation with the War Industries Board, commandeered practically all stocks of new wool, and also the wool clip of 1918. This led to a great shortage of new wool for the manufacture of clothing for civilian use. To meet this shortage, much greater recourse than usual had to be made to the use of shoddy. Shoddy (or "reworked wool") is made from used woolen rags and from "clips," the trimmings and left-over scraps of new material, accumulated in tailoring and garment-making establishments. The business of the woolen-rag trade is the collection, sorting, and grading of the rags and clips for use in the making of shoddy.

As a result of the unprecedented demand developed for woolen rags, the trade underwent a mushroom growth. From the best available information it appears that the quantity of rags collected in the United States increased during 1915 and 1916 about one-third over 1914, and in 1917 about half over 1914. Even this rapid growth

did not keep pace with the public's needs, and in 1918 the Government placed an embargo on the export of all woolen rags (including "clips"). The prices of most grades of woolen rags and "clips" increased during this period from 300 to 500 per cent over 1914 prices.

Coincident with this rapid growth of the trade and the price increases, there developed many objectionable features in the business, which, because of the sudden national importance given the trade through the war-time conditions, became a serious public menace.

The War Industries Board, through its Price-fixing Committee and its Woolen Section, took action to fix maximum prices and to regulate to some extent the character of transactions in rags (including "clips"). It was handicapped to some extent by the lack of definite information concerning the current conditions of a trade which had undergone such marked changes in so short a time. The Federal Trade Commission was therefore called upon by the War Industries Board to make an investigation of the situation. The information gathered by this investigation appears in the present report. The Commission desires herewith to point out certain general conclusions:

1. While the prices of woolen rags and clips advanced to an unprecedented extent, it appears that the larger dealers made a lower rate of profit during 1917 (the latest year for which such information was available) than in earlier years when prices were materially lower. The apparent reason is the much greater investment required to handle their rags when prices were high, and consequently the smaller return on capital invested. The annual rate of "turnover" (i. e., the relation of receipts from sales to investment) dropped from five times in 1915 to three in 1917. The increase in prices went chiefly to pay for the increased cost of collection of the rags before they came into the hands of the sorters and graders, who prepare them for shoddy manufacturers.

2. While the situation created by the war conditions, which made the collection of all woolen rags and clips of prime importance, no longer exists, yet it appears desirable that some measure be taken by the trade in the line of standardization of classification of its product.

## APPENDIX.

### EXHIBIT I.

#### CORRESPONDENCE BETWEEN WAR INDUSTRIES BOARD AND BOSTON WOOL TRADE, APRIL 27, 1918, RELATING TO OFFER OF STOCKS OF WOOL TO THE GOVERNMENT.

[Taken from the Daily News Record April 27, 1918.]

#### BOSTON RESOLUTIONS SUBMITTED.

"Robert H. Brookings, War Industries Board, Washington, D. C.

"At a meeting of the Boston wool trade, held on April 25, the following resolution was unanimously adopted:

"*Resolved*, On April 5, at the request of the Government, Boston wool trade offered all its unsold wools at market values, as of that date. The view of the War Industries Board, having been presented to us, the Boston wool trade now offers all its wool and tops included in the offering of April 5, and also all foreign wools bought since that date, not now under Government's option, of December 15, 1917, as follows:

"July 30, 1917, prices will be the prices to be paid by the Government to wool dealers for all wool costing dealers July 30 prices, or less. For all wool, which can be shown to have cost dealers prices in excess of July 30 prices, the Government will pay on account of overhead and the recognized excess value of spot wool, an amount of 5 per cent above cost on all grades, cost to be composed of out of pocket cost, consisting of first cost, transportation, marine and war insurance, and interest at 6 per cent. But this total in no case to exceed April 5 prices, as per list submitted by the Boston wool trade. This is contingent upon acceptance by all interested. It is understood, of course, that this does not apply to imported wool on which the Government has an option, as of December 15. Complying with your request, we have given no information to the press. We would appreciate a prompt reply, so that we can give out a report of to-day's meeting.

ABRAHAM KOSHLAND,  
*President Boston Wool Trade Association.*"

#### THE WAR INDUSTRIES BOARD'S REPLY.

In reply to this telegram, the War Industries Board to-day wired back, as follows:

"ABRAHAM KOSHLAND,  
*President Boston Wool Trade Association,*  
*501 Summer Street, Boston, Mass., April 27, 1918.*

"Your telegram of 25th received. The Government greatly appreciates the spirit of patriotism which prompted the resolutions offering your wool stock at prices named. The Government accepts the offering made in your telegram and the necessary details for taking over this wool will be arranged by the office of the Quartermaster General. Please telegraph other trade centers whose wools were offered to the Government, giving them full particulars.

ROBERT H. BROOKINGS,  
*Chairman, Price Fixing Committee.*"

## EXHIBIT II.

## ANNOUNCEMENT OF WAR INDUSTRIES BOARD IN THE OFFICIAL BULLETIN, SEPTEMBER 13, 1918, ON THE NEED TO CONSERVE WOOL CLOTH.

## NEED TO CONSERVE WOOL CLOTH IS URGED BY CHAIRMAN BARUCH.

Bernard M. Baruch, chairman of the War Industries Board, authorizes the following:

While no real shortage is to be feared in the supply of woolen cloth or clothing this winter, the country is warned against a mistaken belief that there will be a surplus of free wool over Government requirements. Such a belief might arise through a misconstruction of a statement issued by Gen. Wood, Acting Quartermaster General, in summing up the needs of the military forces to July next. In several instances this was interpreted as meaning that the wool supply was above the demand. That is misleading. The statement referred to the fact that no shortage of clothing need be feared, because of the large stocks of finished clothing and cloth now on hand.

## WOOLENS SECTION STATEMENT.

The woolens section of the War Industries Board, which has a thorough understanding with Gen. Wood, issued a statement that there is at the present time no free wool available for civilian consumption; and renews its warning there must be conservation of wool and of all things made of wool to prevent serious shortage and real distress for a long time to come. This warning applies particularly to the use of cloth and clothing now made up, which will be difficult of renewal when the present stocks are exhausted.

It is announced in a statement issued to-day by Herbert E. Peabody, chief of the woolens section of the War Industries Board, after conferences with experts of the wool section and representatives of the woolen industry, that no program for future civilian consumption can be undertaken at this time. Wool must be imported to meet Government needs, and until there have been such importations and a surplus is disclosed no plans can be made for civilian needs.

Following is the announcement from the woolens section:

"The public statement of the Acting Quartermaster General, in which he has disclosed the wool requirements for the Government for the period July 1, 1918, to July 1, 1919, brings many inquiries as to what wool may be available for civilian consumption. It may now be definitely stated that at present there is no wool available for civilian allocation. The Acting Quartermaster General discloses the fact that a large quantity of wool must be imported to meet military necessities; and until such importations have been made in amount to cover Government needs, program for future civilian consumption can not be undertaken at this time. However, in order that the woolen industry may have the closest touch with the situation, and in order that everyone concerned may be assured that careful consideration is being given the needs of the industry by men from the industry, the Textile Division of the War Industries Board has requested the advisory committee of the War Service Committee of the Wool Manufacturing Industry—Messrs. George B. Sanford, Henry A. Francis and Franklin W. Hobbs—to act in a similar capacity to the woolens section of the War Industries Board, and a meeting will be held September 25."

## CONSERVATION IS URGED.

Conservation of wool and all of the things made of wool can not be too strongly urged, and emphasis can not be too often repeated.

The woolens section has already gone on record that if careful and intelligent planning in buying and using articles of wool is seriously undertaken by the people of this country, they may safeguard themselves from real distress through a wool shortage for a long time to come.

## EXHIBIT III.

ANNOUNCEMENT OF THE WAR INDUSTRIES BOARD IN THE OFFICIAL BULLETIN, NOVEMBER 5, 1918, IN REFUTATION OF RUMORS OF WOOL ALLOCATION FOR CIVILIAN NEEDS.

## RUMORS OF WOOL ALLOCATION FOR CIVILIAN NEEDS REFUTED.

B. M. Baruch, chairman of the War Industries Board, authorizes the following:

The woolens section of the War Industries Board feels that it is desirable to refute rumors of the allocation of wool for civilian needs in the near future and to make the following statement:

The Quartermaster General has ascertained his minimum requirements for the remainder of 1918 and for the first half of 1919. The Shipping Board has carefully estimated its ability to provide tonnage for taking care of the Quartermaster General's program without interfering with the movement of troops and supplies. Due consideration has been given to the present stocks of wool in the hands of the Quartermaster General, to the desirability of not permitting unduly large reserves of wool to accumulate in Army hands at the expense of civilian needs; and full weight has been given to every other factor that could have bearing on the situation. All figures obtainable have been carefully weighed in the light of the available knowledge of the military and shipping situation. The woolens section would gladly make public all of the figures and facts in its hands if it were not so clearly against wise military policy to do so.

## WILL LEAVE SMALL SURPLUS.

After thus considering every pertinent fact and reasonable probability, the woolens section is obliged to conclude that stocks of wool in the possession of the quartermaster after the immediate needs of the Government have been provided for will leave a surplus so small as to preclude any allocation for civilian purposes in the immediate future. Additional supplies of wool for the Army and for civilian purposes are entirely dependent upon future importations until the domestic clip of 1919 is available for use. This situation makes it clear that no allotments of wool for civilian purposes can be considered for sometime to come. Having reached this conclusion on evidence it must accept, the section considers it to be its duty to make public a definite announcement of this fact.

This announcement is made for the purpose of removing uncertainty from the situation for the next few months. The industry may rest assured that allotments for civilian use will be made as soon as this can be done without impairing military operation.

Requests from different sources that sufficient wool should be apportioned to manufacturers to enable them to keep their organizations together and to continue in operation are impossible to meet. But the Quartermaster General, having the seriousness confronting manufacturers in mind, has advanced his buying program and has offered his needs for bids covering the first quarter of 1919, in so far as his stocks of wool will permit. The action of the Quartermaster General provides regular employment for machinery in volume only slightly reduced from the deliveries now being made to him.

With the stock of wool now actually on hand and free against new contracts and the uncertainties that surround importations, the Quartermaster General is compelled to conserve every pound of wool. The woolens section believes that in advancing his program the Quartermaster General has provided the only relief for the industry which may be found at present.

## EXHIBIT IV.

ORDER OF RAILROAD ADMINISTRATION, IN OFFICIAL BULLETIN, AUGUST 19, 1918,  
DIRECTING PROMPT MOVEMENT OF WOOLEN RAGS AND SHODDY.

## PROMPT MOVEMENT ASKED OF WOOLEN RAGS AND SHODDY.

[Supplement No. 1 to Circular No. CS 10.]

WASHINGTON, August 15, 1918.

## TO RAILROADS:

The shortage of wool makes necessary the increased use of substitutes for wool, such as woolen rags and shoddy.

As far as practicable, shipments of woolen rags and shoddy should be accepted and moved promptly on a parity with wool.

The freight traffic committee, North Atlantic Ports, is prepared to issue permits promptly on any such shipments destined to New York, Philadelphia, and Baltimore.

W. C. KENDALL,

*Manager Car Service Section.*

## EXHIBIT V.

ORDER ISSUED JULY 12, 1918, BY WOOLEN RAG AND FIBER ADMINISTRATOR OF WAR INDUSTRIES BOARD, FIXING MAXIMUM PRICES ON WOOLEN RAGS, AND REQUIRING CERTAIN REPORTS.

JULY 12, 1918.

In accordance with the authority given me by the War Industries Board, through H. E. Peabody, chief of woolens section, it is my intention to fix and enforce maximum prices on rags entering into the manufacture of woolen fabrics. With the desire to protect all business interests which may be affected, the announcement of maximum prices will be delayed.

Pending such announcement, I hereby notify each rag grader and producer (or retailer) of rags to at once mail to me at 334 Fourth Avenue, New York City, a record of all sales of woolen rags made by him during the week ending at noon Saturday, July 13, 1918. Such statement to include the names of the purchasers, the quantity of each grade and the price at which each was sold.

Dealers will also report to me the stock of all grades of rags which enter into the manufacture of woolen fabrics, which they have on hand at noon July 13, and will forward me weekly a report of unsold stock on hand Saturday noon of each week, together with a record of all purchases and sales during the week.

I also direct that until further notice no dealer make any sales of rags at prices in excess of those quoted to the last issue of the recognized waste trade publications previous to July 8, 1918.

I shall proceed on the assumption that all dealers are acting in good faith to recognize the desirability of patriotic cooperation; but should evidence of lack of faith be brought to my attention, I shall exercise the power which has been delegated me.

HERBERT E. PEABODY,

*Chief of Woolens Section, War Industries Board.*

By A. L. GIFFORD,

*Woolen Rag and Fiber Administrator.*

## EXHIBIT VI.

ORDER OF PRICE FIXING COMMITTEE OF WAR INDUSTRIES BOARD, AUGUST 19, 1918,  
FIXING MAXIMUM PRICES ON WOOLEN RAGS.

AUGUST 19, 1918.

The price fixing committee of the War Industries Board has fixed the following maximum prices upon various grades of rags which is effective on all sales made from August 19, and remaining in effect until October 1, 1918, and thereafter, pending the compilation of data which is to be furnished by the Federal Trade Commission. These prices are net f. o. b. shipping point and are to apply to sales made both to the Government and to the public.

HERBERT E. PEABODY,

Chief of Woolens Section, War Industries Board.

By A. L. GIFFORD,

Woolen Rag and Fiber Administrator.

Softs:	Cents per lb.	Softs—continued.	Cents per lb.
Mixed softs.....	21½	Soft back carpets.....	4½
Blue serges.....	25	Mixed linseys.....	4½
Brown serges.....	32	Cloth:	
Green serges.....	32	Rough cloth.....	8½
Red serges.....	28	Skirted cloth, ripped from rough	
Black serges.....	22	cloth.....	11½
White softs.....	52	Skirted cloth, sorted from mixed	
White flannels and serges.....	50	rags.....	10
White knits.....	56	Skirted delaines.....	6½
Red knits.....	27½	Light skirted cloth.....	15½
Blue knits, mixed.....	26½	Black and whites.....	17
Silver gray knits.....	45	Fine light skirted cloth.....	18½
Brown knits.....	32	Brown skirted.....	10
Fancy knits.....	21	Dark skirted.....	8½
Black dressed knits.....	30	Black skirted.....	10
Light hoods.....	38	Blue skirted.....	10
Light grey underwear.....	16	Tan skirted.....	25
Fine light merinos.....	32	Light skirted worsteds.....	25
Fine dark merinos.....	25	Blue worsteds.....	21
Coarse dark merinos with serges.....	16	Black worsteds.....	22
Coarse light merinos with serges.....	24	Brown worsteds.....	23
Thibets.....	28½	Dark worsteds.....	17
Wool bodies.....	8½	White linsey flannels.....	7
Wool carpets.....	10½		

## EXHIBIT VII.

ORDER OF PRICE FIXING COMMITTEE OF WAR INDUSTRIES BOARD, AUGUST 21, 1918,  
FIXING MAXIMUM PRICES ON WOOLEN CLIPS.

AUGUST 21, 1918.

The price fixing committee of the War Industries Board has fixed the following prices upon the new woolen clips and also prices for men's wear and women's wear new clips, which are to be paid by the rag collector to the cutter-up, effective on all sales made from August 22, and remaining in effect until October 1, 1918, and thereafter pending the compilation of data which is to be furnished by the Federal Trade Commission. These prices are net f. o. b. shipping point and are based on high standard of grading and should not be paid for inferior packing, and are to apply to sales made both to the Government and to the public.

HERBERT E. PEABODY,

Chief of Woolens Section, War Industries Board.

By A. L. GIFFORD,

Woolen Rag and Fiber Administrator.

Men's wear:	Cents per lb.	Graded clips—Continued.	Cents per lb.
Men's black and blue worsteds..	48	Medium mixed clips.....	32
Fine clothing house clips, light-weight.....	39	Heavyweight clips.....	28
Fine merchant tailor clips.....	38	Coarse dark clips.....	23
Medium clothing house clips, lightweight.....	37	Coarse light clips.....	25
Ordinary clothing house clips, including cotton warps.....	22	Ordinary light clips.....	20
All-wool overcoatings.....	23	Black and white.....	30
Medium overcoatings, free from cotton warps.....	20	Dark grey oxford.....	28
All-wool mackinaws.....	17	Plain black clips.....	26
Mixed overcoatings, including cotton warps.....	10	Blue uniform clips, without edges.....	38
Cotton-warp clothing clips.....	5	Fancy mackinaws.....	20
All-wool flannels.....	25	Union.....	8
Women's wear:		Light unions.....	11
Fine cloak and suit house light-weight mixed clips, including serges.....	33	Light blue serge.....	52
Fine cloak and suit house light-weight mixed clips, without serges.....	25	Black serges.....	50
All-wool mixed serges.....	40	Blue serges.....	50
All-wool cloakings.....	20	Brown serges.....	50
Cotton-warp serges.....	8	Green serges.....	50
Cotton-warp cloak and suit clips.....	5	Red serges.....	50
Graded clips:		Tan serges.....	60
Black worsteds.....	65	Black and blue serge edges.....	35
Blue worsteds.....	62	Dark serges.....	35
Blue worsted edges.....	50	Light serges.....	45
Brown worsteds.....	57	White serges.....	70
Black and white worsted.....	56	Blue cheviot.....	28
Light worsteds.....	54	Red cheviot.....	28
Fine light worsted and clips... 50		Brown cheviot.....	28
Fine lights.....	45	Green cheviot.....	28
Fine dark worsteds.....	48	Black cheviot.....	28
Fine dark worsted and clips... 47		Light blue cheviot.....	28
Fine mixed clips.....	44	Tan cheviot.....	35
Mixed dark clips.....	40	Light homespun.....	35
Mixed clips.....	35	Medium homespun.....	30
		Ordinary homespun.....	25
		Light flannels.....	35
		Blue flannels.....	35
		Red flannels.....	35
		Green flannels.....	35
		French flannels.....	27
		Mixed flannels.....	25
		Black flannels.....	33

## EXHIBIT VIII.

ORDER OF PRICE FIXING COMMITTEE OF WAR INDUSTRIES BOARD, AUGUST 22, 1918,  
FIXING MAXIMUM PRICES ON "REWORKED WOOL OR FIBER" (SHODDY).

AUGUST 22, 1918.

The price fixing committee of the War Industries Board has fixed the following prices on reworked wool or fiber, on sales made from August 22, 1918, to remain in effect until October 1, 1918, and thereafter, pending the compilation of data which is to be furnished by the Federal Trade Commission. These prices are net f. o. b. shipping point and are to apply to sales made both to the Government and to the public.

HERBERT E. PEABODY,

Chief of Woolen Section, War Industries Board.

By A. L. GIFFORD,

Woolen Rag and Fiber Administrator.



These prices are to remain in effect until October 1, 1918, and thereafter, pending the compilation of data which are to be furnished by the Federal Trade Commission. These prices are net f. o. b. selling point and are to apply to sales both to the Government and to the public. These prices include carbonizing, picking and carding. If dyeing is added, the charge for same must not exceed 5 cents for black or O. D. (khaki) without special permit from the fiber administrator.

	Cents.		Cents.
Blue serge.....	48½	Coarse light merinos, with serge.....	50
Brown serge.....	58	Thibets.....	50½
Green serge.....	58	Light skirted cloth.....	39
Red serge.....	55	Black and white.....	42
Black serge.....	44½	Fine light skirted cloth.....	44½
White softs.....	86	Brown cloth.....	29
White flannels and serges.....	83	Dark cloth.....	27
White knits.....	92	Black cloth.....	29
Red knits.....	59	Blue cloth.....	29
Blue knits, mixed.....	57	Tan skirted.....	48
Silver grey knits.....	93	Light worsteds.....	48½
Brown knits.....	66	Blue worsteds.....	43
Fancy knits.....	48½	Black worsteds.....	44½
Black dressed knits.....	63	Brown worsteds.....	46
Light hoods.....	76	Dark worsteds.....	39
Light grey underwear.....	50	Wool carpets.....	30
Fine light merinos.....	58½	Soft back carpets.....	33½
Fine dark merinos.....	48	Skirted delaines.....	36
Coarse dark merinos, with serge.....	38		

## EXHIBIT IX.

## PUBLISHED PRICE QUOTATIONS ON WOOLEN RAGS AND CLIPS, 1904-1911.

Price quotations on old skirted cloth, soft woolen rags, and new tailor clips in the United States, <sup>1</sup> January, 1904 to December 7, 1911.

[Cents per pound.]

	1904		1905		1906		1907		1908		1909		1910		1911	
	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.
Old stock:																
Skirted cloth, mixed.....	6	3½	6	5½	6	5	5	4	4½	4	4½	3½	4½	2½	2½	2½
Light skirted cloth.....	6½	4½	6½	5½	5½	5	5	4	5½	3½	5½	4	5	3	4	3
Fine light skirted cloth.....	6	4½	6	5	7	5	8	7	8	7	8½	7	8½	6	6	5
Blue skirted cloth.....	4½	4	5	4	5½	4½	5½	4	5	3½	4½	4	3½	2½	3	2½
Brown skirted cloth.....	4½	4	4½	4	4½	4	4½	4	4	4	4½	4	4½	2	3	2
Black skirted cloth.....	4½	4	4½	4	4½	4	5	4½	4½	4	4	4	3½	2½	2	2
Dark skirted cloth.....	4½	2½	5	4	4½	3	4	3	3	2½	3	1½	3½	1½	1½	1½
Black skirted worsted.....	9	7	11	8½	11	10	10½	8½	9	5½	7	5½	6	5½	6	4½
Blue skirted worsted.....	6½	5½	8½	5½	9½	8	8½	8	8	5½	6½	4½	5	4	4½	3½
Dark skirted worsted.....	7	5½	7½	6	8½	6½	8½	7	8½	5	6	4½	5	3	3½	2½
Soft woolen No. 1.....	10½	7	11	8½	10½	9	9½	8	8	5	6½	5	6½	4	5½	4½
Soft old red flannels.....	11	8½	12½	10	13½	12	13½	12	12½	10	12	9½	11½	9½	10	7½
Soft old blue flannels.....	8	6	8½	7	10	7½	9	8	9	6	7½	6	7	4	6	4
Soft old white flannels.....	20	18	20	18	20	18	20	18	20	14	16½	13	16½	15	18	15
New stock:																
Mixed French flannels.....															12	10½
Fine merchant tailors, all colors.....	10	7	11	8	12	9	12	11	12	10	11½	7	8½	7	8	5
New brown chevots.....	12	11½	12	11½	12	11½	12	11½	12	11½	12	11½	12	11½	12	11½
New scarlet flannels.....	20	19	20	19	20	19	20	19	20	13	15	5	18	5	18	17
New black flannels.....	15	14	15	14	16	14	16	14	15	10	12	8	10	6	8½	6
Light cadet clips.....	15	14	15	14	15	14	15	14	15	14	18½	13½	18½	16	18½	16
Army blue clips, pure indigo.....	23	20	23	20	23	20	23	20	23	20	22	14	18	16	18	16

<sup>1</sup> From the American Wool and Cotton Reporter.

## EXHIBIT X.

## PUBLISHED PRICE QUOTATIONS ON WOOLEN RAGS AND CLIPS, JANUARY, 1913-APRIL, 1919.

## A. USED MATERIALS.

*Prices on Rags, Woolen, "Rough cloth."*

[Market: New York. Source: Waste Trade Journal. Unit: Pound. Quotation: First Thursday of each month, 1913-1919.]

## ACTUAL PRICES.

	1913	1914	1915	1916	1917	1918	1919
January.....	\$0.0168	\$0.0160	\$0.0375	\$0.0863	\$0.0563	\$0.0550	\$0.0575
February.....	.0180	.0165	.0450	.0925	.0463	.0538	.0700
March.....	.0188	.0185	.0375	.0875	.0500	.0550	.0750
April.....	.0175	.0190	.0300	.0575	.0388	.0588	.0775
May.....	.0155	.0180	.0288	.0563	.0513	.0775	.....
June.....	.0150	.0140	.0288	.0694	.0588	.0725	.....
July.....	.0150	.0150	.0425	.0563	.0538	.0850	.....
August.....	.0153	.0145	.0425	.0475	.0538	.0900	.....
September.....	.0150	.0173	.0550	.0488	.0538	.0875	.....
October.....	.0150	.0200	.0550	.0519	.0525	.0875	.....
November.....	.0160	.0350	.0661	.0694	.0538	.0875	.....
December.....	.0165	.0238	.0631	.0625	.0538	.0587	.....
Quarters:							
First.....	.0179	.0170	.0400	.0888	.0509	.0546	.0675
Second.....	.0160	.0170	.0292	.0611	.0496	.0696	.....
Third.....	.0150	.0156	.0467	.0509	.0538	.0875	.....
Fourth.....	.0158	.0283	.0614	.0613	.0534	.0779	.....
Year.....	.0162	.0190	.0443	.0655	.0519	.0724	.....

## RELATIVE PRICES.

[Average actual price July 1, 1913, to June 30, 1914, = \$0.0162 = 100.]

	104	99	231	533	348	340	354
January.....	111	102	278	571	286	332	432
February.....	116	114	231	540	309	340	469
March.....	108	117	185	355	240	363	478
April.....	96	111	178	348	317	478	.....
May.....	93	86	178	428	363	448	.....
June.....	93	93	262	348	332	525	.....
July.....	94	90	262	293	332	556	.....
August.....	93	107	340	301	332	540	.....
September.....	93	123	340	320	324	540	.....
October.....	99	216	408	428	332	540	.....
November.....	102	147	390	386	332	362	.....
December.....							
Quarters:							
First.....	110	105	242	548	314	337	416
Second.....	99	105	180	377	306	430	.....
Third.....	93	96	288	314	332	540	.....
Fourth.....	98	162	379	378	330	480	.....
Year.....	100	117	273	404	320	446	.....

## REPORT ON WOOLEN RAG TRADE.

## PUBLISHED PRICE QUOTATIONS ON WOOLEN RAGS AND CLIPS, JANUARY, 1913-APRIL, 1919—Continued.

## A. USED MATERIAL—Continued.

*Prices on Rags, Woolen, "Light cloth."*

[Market: New York. Source: Quotations for years 1913-1918, inclusive, are taken from the American Wool and Cotton Reporter, and for the four months of 1919 from the Waste Trade Journal. Unit: Pound. Quotation First week of each month, 1913-1919.]

## ACTUAL PRICES.

	1913	1914	1915	1916	1917	1918	1919
January.....	\$0.0450	\$0.0275	\$0.0625	\$0.1050	\$0.0900	\$0.0950	\$0.1100
February.....	.0450	.0287	.0650	.1175	.0850	.0950	.1100
March.....	.0450	.0337	.0725	.1137	.0750	.0750	.1100
April.....	.0435	.0337	.0687	.1125	.0675	.0650	.1100
May.....	.0425	.0387	.0525	.1025	.0675	.1100	.....
June.....	.0425	.0325	.0525	.1025	.0950	.1100	.....
July.....	.0425	.0362	.0600	.0950	.0950	.1312	.....
August.....	.0412	.0362	.0600	.0862	.0950	.1312	.....
September.....	.0262	.0262	.0862	.0862	.0950	.1312	.....
October.....	.0287	.0312	.0900	.0862	.0850	.1312	.....
November.....	.0287	.0512	.0912	.0862	.0850	.1525	.....
December.....	.0287	.0512	.0912	.0950	.0950	.1525	.....
Quarters:							
First.....	.0450	.0283	.0667	.1121	.0833	.0817	.1100
Second.....	.0428	.0349	.0579	.1058	.0707	.1017	.....
Third.....	.0396	.0328	.0687	.0891	.0950	.1312	.....
Fourth.....	.0287	.0445	.0908	.0891	.0883	.1454	.....
Year.....	.0383	.0351	.0735	.0990	.0850	.1150	.....

## RELATIVE PRICES.

[Average actual price July 1, 1913, to June 30, 1914—\$0.0326—100.]

	1913	1914	1915	1916	1917	1918	1919
January.....	149	90	204	344	295	311	360
February.....	147	94	213	385	278	311	360
March.....	147	110	238	372	246	246	360
April.....	142	110	226	368	221	278	360
May.....	139	127	172	335	221	360	.....
June.....	139	106	172	335	311	360	.....
July.....	139	118	196	311	311	426	.....
August.....	135	118	196	282	311	426	.....
September.....	86	86	282	282	311	426	.....
October.....	94	102	295	282	278	426	.....
November.....	94	168	299	282	278	499	.....
December.....	94	168	299	311	311	499	.....
Quarters:							
First.....	147	93	219	362	273	267	360
Second.....	140	114	190	346	251	332	.....
Third.....	120	107	226	292	311	430	.....
Fourth.....	94	146	297	292	289	485	.....
Year.....	125	115	241	324	281	376	.....

## PUBLISHED PRICE QUOTATION ON WOOLEN RAGS AND CLIPS, JANUARY, 1913-APRIL, 1919—Continued.

## A. USED MATERIALS—Continued.

*Prices on Rags, Woolen, "Skirted delaines."*

[Market: New York. Source: Waste Trade Journal. Unit: Pound. Quotation: First Thursday of each month, 1913-1919.]

## ACTUAL PRICES.

	1913	1914	1915	1916	1917	1918	1919
January.....	\$0.0200	\$0.0135	\$0.0263	\$0.0450	\$0.0425	\$0.0413	\$0.0575
February.....	.0200	.0135	.0338	.0450	.0413	.0413	.0525
March.....	.0213	.0223	.0325	.0619	.0413	.0413	.0475
April.....	.0213	.0223	.0275	.0475	.0375	.0413	.0475
May.....	.0213	.0223	.0275	.0450	.0406	.0438	.....
June.....	.0213	.0150	.0275	.0525	.0406	.0438	.....
July.....	.0213	.0150	.0313	.0525	.0406	.0475	.....
August.....	.0175	.0150	.0288	.0438	.0406	.0525	.....
September.....	.0175	.0190	.0325	.0438	.0406	.0650	.....
October.....	.0175	.0190	.0325	.0400	.0406	.0650	.....
November.....	.0213	.0245	.0350	.0475	.0406	.0650	.....
December.....	.0200	.0245	.0375	.0475	.0413	.0650	.....
Quarters:							
First.....	.0204	.0164	.0309	.0506	.0417	.0413	.0525
Second.....	.0213	.0199	.0275	.0483	.0396	.0430	.....
Third.....	.0188	.0163	.0309	.0467	.0406	.0550	.....
Fourth.....	.0196	.0227	.0350	.0450	.0406	.0650	.....
Year.....	.0200	.0188	.0311	.0477	.0407	.0510	.....

## RELATIVE PRICES.

[Average actual price July 1, 1913, to June 30, 1914—\$0.0187=100.]

	1913	1914	1915	1916	1917	1918	1919
January.....	107	72	141	241	227	221	307
February.....	107	72	181	241	221	221	280
March.....	114	119	174	331	221	221	254
April.....	114	119	147	254	201	221	254
May.....	114	119	147	241	217	234	.....
June.....	114	80	147	281	217	234	.....
July.....	114	80	167	281	217	254	.....
August.....	94	80	154	234	217	281	.....
September.....	94	102	174	234	217	347	.....
October.....	94	102	174	214	217	347	.....
November.....	114	131	187	254	217	347	.....
December.....	107	131	201	254	221	347	.....
Quarters:							
First.....	109	88	165	271	223	221	240
Second.....	114	106	147	258	212	230	.....
Third.....	101	87	165	250	217	294	.....
Fourth.....	105	121	187	241	218	347	.....
Year.....	107	101	166	255	218	272	.....

## REPORT ON WOOLEN RAG TRADE.

## PUBLISHED PRICE QUOTATIONS ON WOOLEN RAGS AND CLIPS, JANUARY, 1913-APRIL, 1919—Continued.

## A. USED MATERIALS—Continued.

*Prices on Rags, Woolen, "Light worsteds."*

[Market: New York. Source: Quotations for years 1913-1918, inclusive, are taken from the American Wool and Cotton Reporter; and for the four months of 1919 from the Waste Trade Journal. Unit: Pound. Quotation: First week of each month, 1913-1919.]

## ACTUAL PRICES.

	1913	1914	1915	1916	1917	1918	1919
January.....			\$0.0925	\$0.1600	\$0.1325	\$0.1500	\$0.1850
February.....		\$0.0587	.1175	.1800	.1350	.1500	.1850
March.....		.0587	.1250	.1750	.1350	.1500	.1850
April.....		.0587	.1200	.1600	.1325	.1600	.1850
May.....		.0587	.0950	.1500	.1250	.2250	.....
June.....		.0587	.0950	.1425	.1550	.2250	.....
July.....		.0525	.1050	.1400	.1550	.2250	.....
August.....		.0525	.1150	.1325	.1500	.2250	.....
September.....		.0550	.1150	.1250	.1350	.2250	.....
October.....		.0650	.1150	.1250	.1350	.2250	.....
November.....		.0850	.1600	.1325	.1500	.2500	.....
December.....		.0812	.1600	.1325	.1500	.2500	.....
Quarters:							
First.....		.0587	.1117	.1717	.1342	.1500	.1850
Second.....		.0587	.1033	.1508	.1375	.1700	.....
Third.....		.0533	.1113	.1325	.1467	.2250	.....
Fourth.....		.0770	.1450	.1300	.1450	.2414	.....
Year.....		.0619	.1178	.1462	.1409	.1967	.....

## RELATIVE PRICES.

[Average actual price Feb. 1 to June 30, 1914—\$0.0587—100.]

January.....		158	272	225	255	315	
February.....	100	200	306	230	255	315	
March.....	100	213	298	230	255	315	
April.....	100	204	272	225	272	315	
May.....	100	162	255	213	382	.....	
June.....	100	162	242	264	382	.....	
July.....	89	178	238	264	382	.....	
August.....	89	195	225	255	382	.....	
September.....	93	195	213	230	382	.....	
October.....	111	195	213	230	382	.....	
November.....	145	272	225	255	425	.....	
December.....	138	272	225	255	425	.....	
Quarters:							
First.....	100	198	242	228	225	315	
Second.....	100	176	256	234	289	.....	
Third.....	91	189	225	249	382	.....	
Fourth.....	131	246	221	246	410	.....	
Year.....	105	200	249	240	334	.....	

## PUBLISHED PRICE QUOTATIONS ON WOOLEN RAGS AND CLIPS, JANUARY, 1913-APRIL, 1919—Continued.

## A. USED MATERIALS—Continued.

*Prices on Rags, Woolen, "Best mixed softs."*

[Market: New York. Source: Waste Trade Journal. Unit: Pound. Quotation: First Thursday of each month, 1913-1919.]

## ACTUAL PRICES.

	1913	1914	1915	1916	1917	1918	1919
January.....	\$0.0663	\$0.0538	\$0.0763	\$0.1538	\$0.1325	\$0.1400	\$0.1575
February.....	.0631	.0550	.0688	.1550	.1125	.1400	.1700
March.....	.0650	.0575	.0850	.1675	.1250	.1400	.1750
April.....	.0650	.0575	.0738	.1163	.1075	.1575	.1775
May.....	.0513	.0550	.0788	.1163	.1300	.1875	.....
June.....	.0500	.0488	.0788	.1363	.1425	.1775	.....
July.....	.0500	.0463	.1025	.1263	.1325	.2100	.....
August.....	.0525	.0450	.0925	.1075	.1350	.2200	.....
September.....	.0518	.0569	.1113	.1068	.1350	.2150	.....
October.....	.0518	.0600	.1125	.1175	.1350	.2150	.....
November.....	.0538	.0738	.1275	.1413	.1375	.2150	.....
December.....	.0538	.0625	.1250	.1350	.1388	.1587	.....
Quarters:							
First.....	.0665	.0554	.0867	.1621	.1233	.1400	.1675
Second.....	.0554	.0538	.0771	.1290	.1267	.1742	.....
Third.....	.0514	.0494	.1021	.1142	.1342	.2150	.....
Fourth.....	.0531	.0654	.1217	.1313	.1371	.1962	.....
Year.....	.0566	.0560	.0900	.1326	.1303	.1814	.....

## RELATIVE PRICES.

[Average actual price July 1, 1913, to June 30, 1914, = \$0.534 = 100.]

	1913	1914	1915	1916	1917	1918	1919
January.....	124	101	143	288	248	262	294
February.....	128	103	185	309	211	262	311
March.....	122	108	159	314	234	262	327
April.....	122	108	138	218	201	295	353
May.....	96	103	148	218	243	351	.....
June.....	94	91	148	255	267	332	.....
July.....	94	87	192	237	248	398	.....
August.....	98	84	173	201	253	413	.....
September.....	97	107	208	204	253	403	.....
October.....	97	112	211	220	253	403	.....
November.....	101	138	239	265	253	403	.....
December.....	101	117	234	253	260	297	.....
Quarters:							
First.....	125	104	162	304	231	262	313
Second.....	104	101	144	230	237	326	.....
Third.....	96	98	191	214	251	403	.....
Fourth.....	99	122	223	246	257	367	.....
Year.....	106	105	181	248	244	337	.....

## PUBLISHED PRICE QUOTATIONS ON WOOLEN RAGS AND CLIPS, JANUARY, 1913-APRIL, 1919—Continued.

## A. USED MATERIALS—Continued.

*Prices on Rags, Woolen, "Blue serges."*

[Market: New York. Sources: Quotations for years 1913-1918, inclusive, are taken from the American Wool and Cotton Reporter, and for the four months of 1919 from the Waste Trade Journal. Unit: Pound. Quotation: First week of each month, 1913-1919.]

## ACTUAL PRICES.

	1913	1914	1915	1916	1917	1918	1919
January.....	\$0.0800	\$0.0512	\$0.0925	\$0.1650	\$0.1850	\$0.1650	\$0.1850
February.....	.0800	.0562	.1450	.1950	.1650	.1650	.1850
March.....	.0800	.0562	.1550	.1950	.1650	.1600	.1950
April.....	.0800	.....	.1500	.1550	.1450	.1650	.1950
May.....	.0800	.0600	.1150	.1500	.1450	.2050	.....
June.....	.0800	.0600	.1150	.1550	.1650	.2050	.....
July.....	.0800	.0550	.1250	.1550	.1650	.2150	.....
August.....	.0600	.0550	.1250	.1275	.1600	.2150	.....
September.....	.0600	.0562	.1550	.1250	.1400	.2150	.....
October.....	.0512	.0562	.1550	.1350	.1450	.2150	.....
November.....	.0512	.0687	.1550	.1600	.1550	.2500	.....
December.....	.0512	.0687	.1550	.1850	.1650	.2500	.....
Quarters:							
First.....	.0567	.0545	.1308	.1850	.1663	.1633	.1900
Second.....	.0800	.0600	.1267	.1533	.1517	.1917	.....
Third.....	.0800	.0554	.1350	.1358	.1550	.2150	.....
Fourth.....	.0512	.0778	.1550	.1600	.1550	.2383	.....
Year.....	.0570	.0610	.1369	.1585	.1575	.2021	.....

## RELATIVE PRICES.

[Average actual price July 1, 1913, to June 30, 1914 = \$0.0561 = 100.]

	89	91	165	268	329	268	329
January.....	107	100	258	345	268	268	329
February.....	107	100	275	345	275	264	345
March.....	107	.....	267	375	268	268	345
April.....	107	107	204	267	268	365	.....
May.....	107	107	204	375	268	365	.....
June.....	107	98	222	375	268	382	.....
July.....	107	98	222	237	264	382	.....
August.....	107	100	275	232	249	382	.....
September.....	91	100	275	240	268	382	.....
October.....	91	158	275	284	275	444	.....
November.....	91	158	275	329	268	444	.....
December.....							
Quarters:							
First.....	101	97	232	329	269	268	338
Second.....	107	107	226	273	269	340	.....
Third.....	107	98	240	241	275	382	.....
Fourth.....	91	138	275	284	275	424	.....
Year.....	101	110	244	282	280	360	.....

## PUBLISHED PRICE QUOTATIONS ON WOOLEN RAGS AND CLIPS, JANUARY, 1913-APRIL, 1919—Continued.

## A. USED MATERIALS—Continued.

*Prices on Rags, Woolen, "Mixed linseys."*

[Market: New York. Source: Waste Trade Journal. Unit: Pound. Quotation: First Thursday of each month, 1913-1919.]

## ACTUAL PRICES.

	1913	1914	1915	1916	1917	1918	1919
January.....			\$0. 0163	\$0. 0238	\$0. 0350	\$0. 0288	\$0. 0375
February.....			.0200	.0238	.0263	.0288	.0375
March.....			.0275	.0350	.0263	.0288	.0325
April.....			.0200	.0425	.0263	.0288	.0325
May.....			.0138	.0300	.0263	.0288	
June.....		\$0. 0100	.0138	.0338	.0263	.0288	
July.....		.0100	.0138	.0338	.0288	.0325	
August.....		.0100	.0150	.0300	.0288	.0375	
September.....		.0100	.0200	.0300	.0288	.0425	
October.....		.0100	.0163	.0300	.0288	.0425	
November.....		.0150	.0175	.0350	.0288	.0425	
December.....		.0150	.0200	.0350	.0288	.0375	
Quarters:							
First.....			.0213	.0275	.0292	.0288	.0358
Second.....		.0100	.0159	.0354	.0263	.0288	
Third.....		.0100	.0163	.0313	.0263	.0375	
Fourth.....		.0133	.0179	.0333	.0288	.0408	
Year.....		.0114	.0178	.0319	.0283		

## RELATIVE PRICES.

[Average actual price July 1, 1913 to June 30, 1914 = \$0. 01 = 100.]

	1913	1914	1915	1916	1917	1918	1919
January.....			163	238	350	288	375
February.....			200	238	263	288	375
March.....			275	350	263	288	325
April.....			200	425	263	288	325
May.....			138	300	263	288	
June.....		100	138	338	263	288	
July.....		100	138	338	288	325	
August.....		100	150	300	288	375	
September.....		100	200	300	288	425	
October.....		100	163	300	288	425	
November.....		150	175	350	288	425	
December.....		150	200	350	288	375	
Quarters:							
First.....			213	275	292	288	358
Second.....		100	159	354	263	288	
Third.....		100	163	313	263	375	
Fourth.....		133	179	333	288	408	
Year.....		114	178	319	283	340	



## PUBLISHED PRICE QUOTATIONS ON WOOLEN RAGS AND CLIPS, JANUARY, 1913-APRIL, 1919—Continued.

## B. NEW WOOLEN CLIPS.

*Prices on Rags, New Woollen Clips, "Fine merchant tailor" clips.*

[Market: New York. Source: Waste Trade Journal. Unit: Pound. Quotations: First Thursday of each month, 1913-1919.]

## ACTUAL PRICES.

	1913	1914	1915	1916	1917	1918	1919
January.....	\$0.0675	\$0.0750	\$0.0950	\$0.2300	\$0.2350	\$0.2500	\$0.3100
February.....	.0675	.0800	.1100	.2850	.2000	.2000	.2900
March.....	.0625	.0800	.1400	.2350	.2000	.2000	.2900
April.....	.0625	.0688	.1250	.2100	.1850	.2000	.2900
May.....	.0788	.0800	.1250	.2100	.2050	.2800	.....
June.....	.0750	.0800	.1250	.2100	.2150	.3100	.....
July.....	.0663	.0700	.1300	.2100	.2150	.3300	.....
August.....	.0688	.0700	.1300	.1900	.2150	.3650	.....
September.....	.0688	.0925	.1625	.1850	.2150	.3900	.....
October.....	.0750	.0950	.1550	.1850	.2150	.3900	.....
November.....	.0800	.0875	.1700	.2100	.2200	.3900	.....
December.....	.0800	.0875	.1850	.2250	.2400	.3900	.....
Quarters:							
First.....	.0725	.0783	.1150	.2500	.2133	.2567	.2967
Second.....	.0788	.0839	.1250	.2100	.2017	.2933	.....
Third.....	.0880	.0775	.1408	.1950	.2150	.3583	.....
Fourth.....	.0783	.0900	.1700	.2067	.2283	.3633	.....
Year.....	.0744	.0822	.1377	.2154	.2146	.3154	.....

## RELATIVE PRICES.

[Average actual price July 1, 1913, to June 30, 1914—\$0.0769=100.]

	88	98	124	299	306	325	408
January.....	88	98	124	299	306	325	408
February.....	88	104	143	371	260	338	377
March.....	107	104	132	306	267	338	377
April.....	107	115	163	273	241	338	377
May.....	102	104	163	273	267	364	.....
June.....	98	104	163	273	280	408	.....
July.....	86	91	169	273	280	429	.....
August.....	89	91	169	247	280	475	.....
September.....	89	120	211	241	280	494	.....
October.....	98	124	202	241	280	494	.....
November.....	104	114	221	273	299	494	.....
December.....	104	114	241	293	312	429	.....
Quarters:							
First.....	94	102	150	325	277	334	347
Second.....	102	106	163	273	262	368	.....
Third.....	88	101	183	254	280	465	.....
Fourth.....	102	117	221	269	297	471	.....
Year.....	97	107	179	280	279	410	.....

## PUBLISHED PRICE QUOTATIONS ON WOOLEN RAGS AND CLIPS, JANUARY, 1913-APRIL, 1919—Continued.

## B. NEW WOOLEN CLIPS—Continued.

*Prices on Rags, New Woollen Clips, "Black worsteds."*

[Market: New York. Source: Waste Trade Journal. Unit: Pound. Quotation: First Thursday of each month, 1913-1919.]

## ACTUAL PRICES.

	1913	1914	1915	1916	1917	1918	1919
January.....	\$0.1660	\$0.1625	\$0.1800	\$0.3200	\$0.3550	\$0.4375	\$0.5600
February.....	.1660	.1550	.1900	.3650	.3500	.4375	.5600
March.....	.1700	.1600	.....	.3150	.3450	.4375	.5100
April.....	.1700	.1650	.....	.3350	.3250	.4375	.5100
May.....	.1700	.1550	.....	.3500	.3300	.4375	.....
June.....	.1660	.1550	.....	.3450	.3375	.4700	.....
July.....	.1650	.1450	.....	.3450	.3375	.5200	.....
August.....	.1550	.1450	.....	.3500	.3375	.5750	.....
September.....	.1550	.1700	.2450	.3200	.3375	.6500	.....
October.....	.1650	.1700	.2350	.2900	.3300	.6500	.....
November.....	.1700	.1650	.2550	.3550	.3500	.6500	.....
December.....	.1700	.1650	.2850	.3650	.4375	.6450	.....
Quarters:							
First.....	.1667	.1558	.1850	.3333	.3500	.4375	.5500
Second.....	.1683	.1583	.....	.3433	.3308	.4483	.....
Third.....	.1583	.1533	.2450	.3383	.3375	.5817	.....
Fourth.....	.1683	.1667	.2583	.3367	.3725	.6483	.....
Year.....	.1664	.1585	.2317	.3379	.3477	.5290	.....

## RELATIVE PRICES.

[Average actual price July 1, 1913, to June 30, 1914—\$0.1602=100.]

	1913	1914	1915	1916	1917	1918	1919
January.....	103	95	112	200	222	273	362
February.....	103	97	119	228	218	273	349
March.....	106	100	.....	197	215	273	318
April.....	106	103	.....	209	203	273	318
May.....	106	97	.....	218	206	273	.....
June.....	103	97	.....	215	211	293	.....
July.....	103	91	.....	215	211	325	.....
August.....	97	91	.....	218	211	359	.....
September.....	97	106	153	200	211	406	.....
October.....	103	106	147	181	206	406	.....
November.....	106	103	159	222	218	406	.....
December.....	106	103	178	228	273	402	.....
Quarters:							
First.....	104	97	115	208	218	273	343
Second.....	105	99	.....	214	206	280	.....
Third.....	99	96	153	211	211	363	.....
Fourth.....	105	104	161	210	233	404	.....
Year.....	103	99	145	211	217	330	.....

## PUBLISHED PRICE QUOTATIONS ON WOOLEN RAGS AND CLIPS, JANUARY, 1913-APRIL, 1919—Continued.

## B. NEW WOOLEN CLIPS—Continued.

*Prices on Rags, New Woollen Clips, "Blue worsteds."*

[Market: New York. Source: Waste Trade Journal. Unit: Pound. Quotations: First Thursday of each month, 1913-1919.]

## ACTUAL PRICES.

	1913	1914	1915	1916	1917	1918	1919
January.....	\$0.1150	\$0.1125	\$0.1700	\$0.3100	\$0.3450	\$0.4250	\$0.5300
February.....	.1150	.1300	.1950	.3450	.3150	.4250	.4700
March.....	.1550	.1350	.2400	.3100	.3175	.4150	.4550
April.....	.1350	.1413	.2150	.2950	.3150	.4150	.4550
May.....	.1350	.1300	.2150	.2900	.3125	.4200	.....
June.....	.1225	.1300	.2150	.2900	.3225	.4500	.....
July.....	.1050	.1200	.2100	.2900	.3225	.5650	.....
August.....	.1100	.1150	.2150	.2750	.3275	.6100	.....
September.....	.1100	.1500	.2450	.2650	.3200	.6200	.....
October.....	.1250	.1550	.2200	.2350	.3200	.6200	.....
November.....	.1306	.1500	.2550	.3200	.3700	.6200	.....
December.....	.1306	.1500	.2700	.3150	.3700	.6100	.....
Quarters:							
First.....	.1263	.1292	.2017	.3217	.3258	.4217	.4850
Second.....	.1308	.1338	.2150	.2850	.3167	.4317	.....
Third.....	.1083	.1283	.2233	.2733	.3233	.5983	.....
Fourth.....	.1287	.1517	.2483	.2900	.3533	.6167	.....
Year.....	.1241	.1357	.2221	.2925	.3298	.5171	.....

## RELATIVE PRICES.

[Average actual price July 1, 1913, to June 30, 1914—\$0.125=100.]

	1913	1914	1915	1916	1917	1918	1919
January.....	92	98	136	248	276	340	424
February.....	92	104	156	276	252	340	376
March.....	124	108	192	248	254	332	380
April.....	108	113	172	236	252	332	360
May.....	108	104	172	224	250	344	.....
June.....	98	104	172	224	258	360	.....
July.....	84	96	168	224	258	452	.....
August.....	88	92	172	220	262	488	.....
September.....	88	120	196	212	256	495	.....
October.....	100	124	176	188	256	495	.....
November.....	104	120	204	256	296	495	.....
December.....	104	120	216	252	296	488	.....
Quarters:							
First.....	103	103	161	257	261	337	388
Second.....	105	107	172	228	252	345	.....
Third.....	87	103	179	219	259	478	.....
Fourth.....	103	121	199	232	283	493	.....
Year.....	99	109	178	234	264	413	.....

## PUBLISHED PRICE QUOTATIONS ON WOOLEN RAGS AND CLIPS, JANUARY, 1913-APRIL, 1919—Continued.

## B. NEW WOOLEN CLIPS—Continued.

*Prices on Rags, New Woolen Clips, "Fine light worsteds."*

[Market: New York. Source: Waste Trade Journal. Unit: Pound. Quotation: First Thursday of each month, 1913-1919.]

## ACTUAL PRICES.

	1913	1914	1915	1916	1917	1918	1919
January.....	\$0.1150	\$0.1225	\$0.1400	\$0.2500	\$0.2650	\$0.3500	\$0.4200
February.....	.1180	.1300	.1650	.3300	.2350	.3500	.4000
March.....	.1500	.1350	.1750	.2600	.2450	.3500	.4000
April.....	.1409	.1400	.1650	.2400	.2450	.3500	.4000
May.....	.1409	.1280	.1650	.2400	.2250	.3650	.....
June.....	.1250	.1280	.1750	.2400	.2350	.3850	.....
July.....	.1050	.1200	.1900	.2800	.2350	.4200	.....
August.....	.1100	.1150	.1900	.2150	.2350	.4700	.....
September.....	.1100	.1400	.2400	.2200	.2350	.5000	.....
October.....	.1200	.1450	.2050	.2050	.2250	.5000	.....
November.....	.1225	.1400	.2500	.2550	.2900	.5000	.....
December.....	.1225	.1400	.2550	.2450	.3500	.4600	.....
Quarters:							
First.....	.1267	.1292	.1600	.2800	.2463	.3500	.4067
Second.....	.1350	.1300	.1683	.2400	.2350	.3667	.....
Third.....	.1088	.1250	.2067	.2217	.2350	.4633	.....
Fourth.....	.1283	.1417	.2367	.2350	.2883	.4966	.....
Year.....	.1246	.1315	.1920	.2442	.2517	.4167	.....

## RELATIVE PRICES.

[Average actual price July 1, 1913, to June 30, 1914, = \$0.1240=100.]

	1913	1914	1915	1916	1917	1918	1919
January.....	93	99	113	202	214	282	338
February.....	93	105	133	256	190	282	322
March.....	121	109	141	210	198	282	322
April.....	113	113	133	194	198	282	322
May.....	113	101	133	194	181	294	.....
June.....	101	101	141	194	190	310	.....
July.....	85	97	153	185	190	339	.....
August.....	89	93	153	173	190	379	.....
September.....	89	113	194	177	190	408	.....
October.....	97	117	165	165	181	408	.....
November.....	107	113	202	206	224	408	.....
December.....	107	113	206	198	282	370	.....
Quarters:							
First.....	102	104	129	226	200	282	327
Second.....	109	105	136	134	190	296	.....
Third.....	87	101	167	179	190	372	.....
Fourth.....	108	114	191	190	223	392	.....
Year.....	100	106	156	197	203	336	.....

## PUBLISHED PRICE QUOTATIONS ON WOOLEN RAGS AND CLIPS, JANUARY, 1913-APRIL, 1919—Continued.

## B. NEW WOOLEN CLIPS—Continued.

*Prices on Rags, New Woollen Clips, "Blue serges."*

[Market: New York. Source: Waste Trade Journal. Unit: Pound. Quotation: First Thursday of each month, 1913-1919.]

## ACTUAL PRICES.

	1913	1914	1915	1916	1917	1918	1919
January.....	\$0.1050	\$0.0900	\$0.1650	\$0.2800	\$0.2350	\$0.2450	\$0.4300
February.....	.1050	.0900	.2100	.3100	.2400	.2450	.4300
March.....	.1150	.0925	.2300	.2850	.2425	.2450	.4300
April.....	.1075	.0925	.1850	.2350	.2350	.2450	.4300
May.....	.1075	.0938	.1850	.2300	.2450	.4100	.....
June.....	.1075	.0938	.1850	.2300	.2750	.4500	.....
July.....	.0750	.0913	.1950	.2300	.2750	.4900	.....
August.....	.0788	.0900	.1950	.2300	.2750	.5100	.....
September.....	.0850	.1100	.2450	.2050	.2750	.5000	.....
October.....	.0900	.1350	.2250	.....	.2750	.5000	.....
November.....	.1025	.1250	.2650	.2350	.3100	.5000	.....
December.....	.1025	.1250	.2700	.2550	.3650	.4600	.....
Quarters:							
First.....	.1083	.0908	.2017	.2917	.2392	.3650	.4300
Second.....	.1075	.0934	.1850	.2317	.2517	.4083	.....
Third.....	.0796	.0971	.2117	.2217	.2750	.4967	.....
Fourth.....	.0983	.1283	.2533	.2450	.3167	.4967	.....
Year.....	.0984	.1024	.2129	.2477	.2706	.4302	.....

## RELATIVE PRICES.

[Average actual prices July 1, 1913, to June 30, 1914,—\$0.0905=100.]

	1913	1914	1915	1916	1917	1918	1919
January.....	116	99	182	309	260	403	475
February.....	116	99	232	343	265	403	475
March.....	127	102	254	315	268	403	475
April.....	119	102	204	260	260	403	475
May.....	119	104	204	254	271	453	.....
June.....	119	104	204	254	304	497	.....
July.....	88	101	215	254	304	530	.....
August.....	87	99	215	254	304	564	.....
September.....	94	122	271	227	304	552	.....
October.....	99	149	249	.....	304	552	.....
November.....	113	138	293	260	343	552	.....
December.....	113	138	298	282	403	508	.....
Quarters:							
First.....	120	100	223	322	264	403	475
Second.....	119	103	204	256	278	451	.....
Third.....	88	107	234	245	304	548	.....
Fourth.....	109	142	280	271	350	537	.....
Year.....	109	113	235	274	299	485	.....

# REPORT ON WOOLEN RAG TRADE.

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PUBLISHED PRICE QUOTATIONS ON WOOLEN RAGS AND CLIPS, JANUARY, 1913-APRIL, 1919—Continued.

## B. NEW WOOLEN CLIPS—Continued.

*Prices on Rags, New Woollen Clips, "White serges."*

[Market: New York. Source: Waste Trade Journal. Unit: Pound. Quotation: First Thursday of each month, 1913-1919.]

### ACTUAL PRICES.

	1913	1914	1915	1916	1917	1918	1919
January.....		\$0.2300		\$0.2300	\$0.2000	\$0.4650	\$0.7100
February.....		.2200				.4650	.6750
March.....		.2200				.4650	.6750
April.....		.2200		.3500		.4650	.6750
May.....		.2600		.3500		.4850	
June.....		.3050		.3450		.4850	
July.....		.3050		.3450		.5350	
August.....		.3050		.3450		.5700	
September.....				.3250	.8600	.7000	
October.....	\$0.2750		\$0.3400	.3900	.8600	.7000	
November.....	.2875		.2550	.3900	.4100	.7000	
December.....	.2875			.3900	.4650	.7000	
Quarters:							
First.....		.2300		.3800	.2900	.4650	.6867
Second.....		.2083		.3467		.4783	
Third.....		.2050		.3350	.8600	.6017	
Fourth.....	.2833		.2875	.3900	.4117	.7000	
Year.....	.2833	.2119	.2875	.3285	.3770	.5612	

### RELATIVE PRICES.

[Average actual price July 1, 1913, to June 30, 1914, —\$0.2872—100.]

January.....		93		100	122	196	209
February.....		93				196	204
March.....		93				196	204
April.....		93		148		196	204
May.....		94		148		204	
June.....		86		143		204	
July.....		86		143		226	
August.....		86		143		240	
September.....				137	152	295	
October.....	116		143	122	152	295	
November.....	121		108	122	173	295	
December.....	121			122	196	295	
Quarters:							
First.....		93		100	122	196	209
Second.....		88		146		202	
Third.....		86		141	152	253	
Fourth.....	119		125	122	174	295	
Year.....	119	80	125	139	159	236	

## EXHIBIT XI.

PRICES COMPILED FROM REPORTS TO WAR INDUSTRIES BOARD MADE BY RAG DEALERS,  
JULY-SEPTEMBER, 1918.

	High.	Low.	Generally prevail- ing price.	Maxi- mum estab- lished by War In- dustries Board.	Extent to which maximum ex- ceeds generally prevailing price.
<b>SOFT WOOLENS.</b>					
Mixed softs.....	\$0.21	\$0.18½	\$0.20½	\$0.21½	\$0.01
<i>Graded softs.</i>					
Blue serge.....	.27	.12½	.20 to \$0.21½	.25	.03½ to \$0.05
Brown serge.....	.35	.18	.25 to .28	.32	.04 to .07
Green serge.....	.39	.23	.26 to .27½	.32	.04½ to .06
Red serge.....	.35	.21	.22 to .23	.28	.05 to .06
Black serge.....	.22	.13½	.17 to .18	.22	.04 to .05
White softs.....	.55	.20	.44 to .45	.52	.04 to .08
White flannel and serge.....	.48	.48	.48	.50	.02
White knits.....	.56	.30	.45 to .52	.56	.04 to .11
Red knits mixed.....	.34	.19	.21 to .22½	.27½	.05 to .06½
Blue knits mixed.....	.26½	.18½	.21 to .22	.26½	.04½ to .05½
Silver gray knits.....	.42	.35	.36 to .37½	.45	.07½ to .09
Brown knits.....	.47½	.19	.26 to .27½	.32	.04½ to .06
Fancy knits.....	.49	.15	.17 to .19	.21	.02 to .04
Black dressed knits.....	.30	.20	.27	.30	.03
Light hoods.....	.43	.30	.33 to .35½	.38	.02½ to .05
Light gray underwear.....	.36	.08½	.10 to .13	.16	.03 to .06
Fine light merino.....	.32	.18	.26½ to .28	.32	.04 to .06½
Fine dark merino.....	.23	.15	.16 to .18	.25	.07 to .09
Coarse dark merino with serge.....	.18	.10	.13 to .14½	.16	.01½ to .03
Coarse light merino with serge.....	.25	.09	.13 to .21	.24	.03 to .06
Thibets.....	.32½	.17	.20 to .21½	.28½	.07 to .08½
Mixed linseys.....	.07½	.02½	.03½ to .04	.04½	.00½ to .01
<i>Carpets.</i>					
Wool.....	.11½	.05½	.08 to .09½	.10½	.00½ to .01½
Soft back.....	.06	.03	.03½ to .04½	.04½	.00½ to .01
<b>HARD WOOLENS.</b>					
Rough cloth.....	.10½	.06	.08 to .08½	.08½	.00 to .00½
<i>Skirted cloth.</i>					
Ripped from rough cloth.....				.11½	
Sorted from mixed rags.....				.10	
Mixed delaines.....	.08½	.03	.04½ to .05½	.06½	.01 to .02
Light cloth.....	.25	.09½	.12 to .13½	.15½	.02 to .03½
Black and white cloth.....	.18	.11½	.12½ to .14½	.17	.02½ to .03½
Fine light cloth.....	.18	.12½	.15 to .16	.18½	.02½ to .03½
Brown cloth.....	.09	.05½	.07½ to .08½	.10	.01½ to .02½
Dark cloth.....	.11½	.05	.06	.08½	.02½
Black cloth.....	.12	.05	.06 to .06½	.10	.03½ to .04½
Blue cloth.....	.17	.06½½	.06½ to .07½	.10	.02½ to .03½
Tan cloth.....	.25	.13	.20 to .21½	.25	.03½ to .05
Light worsted.....	.36	.15	.20 to .23	.25	.02 to .05
Blue worsted.....	.24½	.13	.17 to .18	.21	.03 to .04
Black worsted.....	.25	.15	.17 to .19	.22	.03 to .05
Brown worsted.....	.22	.14½	.17 to .19	.23	.04 to .06
Dark worsted.....	.36	.10	.13 to .14	.17	.03 to .04
White fancy flannels.....	.13	.04	.04½ to .05½	.07	.00½ to .02½
<i>Graded clips.</i>					
Black worsted.....	.65	.35	.55 to .58	.65	.07 to .10
Blue worsted.....	.70	.30	.55 to .58	.62	.04 to .07
Blue worsted edges.....	.52½	.25	.45	.50	.05
Brown worsted.....	.57	.30	.40 to .43	.57	.14 to .17
Black and white worsted.....	.54	.30	.44 to .47	.56	.06 to .12
Light worsted.....	.60	.25	.36 to .38	.54	.16 to .18
Fine light worsted and cloth.....				.50	
Fine light cloth.....	.45	.34	.39 to .42	.45	.03 to .06
Fine dark worsted.....	.48	.35½	.38	.48	.10
Fine dark worsted and cloth.....	.46	.39	.44 to .45	.47	.02 to .03
Fine mixed clips.....	.58	.21	.35 to .40	.44	.04 to .09
Mixed dark clips.....	.47	.14	.35 to .40	.40	.00 to .05
Mixed clips.....				.35	
Medium mixed clips.....				.32	

PRICES COMPILED FROM REPORTS TO WAR INDUSTRIES BOARD MADE BY RAG DEALERS,  
JULY-SEPTEMBER, 1918—Continued.

	High.	Low.	Generally prevail- ing price.	Maxi- mum establis- hed by War In- dustries Board.	Extent to which maximum ex- ceeds generally prevailing price.
<b>HARD WOOLENS—continued.</b>					
<i>Graded clips—Continued.</i>					
Heavyweight clips.....				.28	.....
Coarse dark clips.....	.22½	.18	.19	.23	.04
Coarse light clips.....				.25	.....
Ordinary light clips.....	.32½	.10	.12 to .14	.20	.06 to .06
Black and white.....	.26	.22	.24 to .25	.30	.05 to .06
Dark gray oxford.....	.40	.06½	.25 to .28	.26	.01 to .02
Blue uniform clips (without edges)...	.40	.27	.30 to .35	.38	.03 to .06
Fancy mackinaw.....				.20	.....
Ordinary unions.....	.22	.02	.05 to .06	.08	.02 to .03
Light unions.....	.11	.04	.06½ to .07½	.11	.03½ to .06½
Light blue serge.....	.63	.86	.44 to .48	.52	.04 to .08
Black serge.....	.50	.32	.40 to .45	.50	.05 to .10
Blue serge.....	.57½	.23	.45 to .50	.50	.05 to .10
Brown serge.....	.57½	.32	.40 to .45	.50	.05 to .10
Green serge.....	.52	.35	.40 to .45	.50	.05 to .10
Red serge.....	.50	.30	.40 to .45	.50	.05 to .10
Tan serge.....	.70	.38	.45 to .50	.60	.10 to .15
Black and blue serge edges.....				.35	.....
Dark serges.....	.33	.18	.22 to .25	.35	.10 to .13
Light serges.....	.43	.20	.35 to .40	.45	.05 to .10
White serges and flannels.....	.75	.44	.55 to .60	.70	.10 to .15
Blue cheviot.....	.35	.24	.25 to .28	.28	.00 to .03
Red cheviot.....	.28½	.22	.25	.28	.03
Brown cheviot.....	.31	.20	.25 to .28	.28	.00 to .03
Green cheviot.....	.28	.22	.24 to .26	.28	.02 to .04
Black cheviot.....	.27	.23	.25	.28	.03
Light blue chevlots.....				.28	.....
Tan cheviot.....				.35	.....
Light homespun.....	.32	.20	.24 to .26	.35	.09 to .11
Medium homespun.....				.30	.....
Ordinary homespun.....				.25	.....
Light flannels.....	.51	.25	.28 to .33	.35	.02 to .07
Blue flannels.....	.42	.20	.30 to .35	.35	.00 to .05
Red flannels.....	.40	.20	.28 to .30	.35	.05 to .07
Green flannels.....	.35	.25	.33 to .35	.35	.00 to .02
French flannels.....	.38½	.16	.25 to .30	.27	.02 to .03
Mixed flannels.....	.40	.20	.25 to .30	.25	.00 to .05
Black flannels.....	.42	.25	.32 to .35	.33	.00 to .01
<i>Ungraded clips.</i>					
Fine merchant tailor.....	.44	.35	.38 to .40	.38	.....



## EXHIBIT XII.

PRICES COMPILED FROM INFORMATION COLLECTED FROM THE RECORDS OF DEALERS  
BY THE FEDERAL TRADE COMMISSION.

Schedule showing fluctuations in prices of specific grades of rags for period from Jan. 1,  
1917, to Nov. 1, 1918.

## OLD RAGS.

Kind of rags.	1917				1918							
	January.		July.		January.		April.		July.		October-November.	
	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.
<b>SOFT WOOLENS.</b>												
Mixed soft.....	\$0.13	\$0.11	\$0.13	\$0.11	\$0.14	\$0.11	\$0.15	\$0.14	\$0.21	\$0.17	\$0.23	\$0.21
White softs.....	.25	.25	.32	.30	.41	.34	.40	.28	.47	.44	.52	.39
White knit.....	.27	.26	.34	.32	.43	.42	.42	.37	.52	.44	.55	.51
Light hoods.....	.21	.20	.22	.22	.25	.25	.31	.27	.37	.34	.37	.34
Fancy knit.....	.14	.12	.14	.13	.20	.15	.18	.14	.20	.17	.19	.17
Steel gray knit.....	.17	.17	.20	.20	.35	.25	.35	.26	.40	.38	.45	.35
Blue knit.....	.18	.16	.17	.17	.22	.17	.24	.19	.24	.22	.24	.22
Black knit.....	.24	.24	.25	.25	.28	.23	.28	.24	.29	.26	.30	.27
Red knit.....	.24	.23	.20	.19	.26	.23	.26	.20	.23	.23	.27	.26
Red softs.....	.23	.21	.21	.19	.20	.20	.29	.20	.22	.22	.21	.21
Fine light merino.....	.23	.22	.25	.23	.27	.26	.28	.25	.30	.29	.30	.21
Coarse light merino.....	.12	.10	.14	.13	.16	.16	.19	.11	.25	.16	.24	.18
Fine dark merino.....	.23	.21	.16	.16	.16	.15	.18	.15	.22	.16	.28	.19
Coarse dark merino.....	.08	.06	.09	.08	.11	.09	.11	.09	.15	.10	.15	.12
Brown serge.....	.20	.20	.18	.18	.24	.18	.26	.23	.30	.26	.31	.18
Green serge.....	.23	.21	.22	.22	.25	.22	.28	.22	.36	.27	.29	.27
Blue serge.....	.17	.15	.13	.13	.18	.14	.20	.14	.23	.18	.22	.20
Black serge.....	.18	.17	.14	.14	.15	.14	.17	.14	.19	.15	.22	.19
<b>HARD WOOLENS.</b>												
Rough cloth.....	.05	.05	.05	.05	.05	.05	.06	.05	.08	.07	.09	.08
Light cloth.....	.05	.04	.06	.05	.11	.08	.11	.08	.13	.08	.15	.12
Tan cloth.....	.16	.14	.15	.14	.16	.16	.18	.16	.21	.21	.24	.21
Light worsted.....	.11	.11	.12	.11	.15	.13	.19	.15	.24	.15	.23	.21
Brown worsted.....	.17	.13	.14	.11	.17	.14	.19	.14	.25	.16	.25	.19
Black worsted.....	.21	.15	.17	.14	.20	.14	.20	.14	.26	.14	.20	.19
Blue worsted.....	.18	.14	.16	.12	.18	.14	.18	.13	.20	.13	.19	.17
Dark worsted.....	.14	.11	.10	.09	.11	.09	.12	.09	.14	.11	.15	.14
Dark cloth.....	.06	.06	.05	.05	.06	.05	.06	.04	.07	.06	.08	.06
Brown cloth.....	.09	.09	.08	.08	.07	.07	.08	.07	.08	.08	.09	.07
Black cloth.....	.09	.08	.08	.08	.08	.06	.06	.06	.07	.06	.09	.09
Delaines (skirted mixed).....	.04	.04	.03	.03	.03	.....	.04	.04	.05	.05	.06	.06
Wool carpets.....	.07	.06	.07	.07	.07	.06	.07	.07	.08	.08	.09	.09

## NEW RAGS.

Kind of clips.	1917				1918							
	January.		July.		January.		April.		July.		October-November.	
	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.
Fine mixed clips.....	\$0.25	\$0.25	\$0.25	\$0.25	\$0.31	\$0.31	\$0.34	\$0.28	\$0.45	\$0.32	\$0.44	\$0.35
Mixed clips.....	.22	.22	.24	.22	.29	.29	.29	.18	.38	.23	.42	.30
Cotton warp cloaking.....	.12	.11	.12	.12	.12	.12	.12	.12	.12	.09	.12	.08
Fine merchant tailor clips.....	.19	.19	.22	.20	.27	.26	.29	.25	.40	.37	.37	.37
Blue worsted.....	.39	.36	.40	.40	.45	.40	.46	.41	.57	.55	.62	.61
Blue worsted.....	.37	.35	.37	.37	.44	.44	.44	.39	.58	.52	.62	.69
Black and white worsted.....	.32	.32	.34	.30	.40	.38	.52	.44	.52	.44	.56	.55
Brown worsted.....	.27	.27	.30	.30	.35	.35	.42	.39	.46	.43	.57	.49
Dark worsted.....	.30	.30	.30	.29	.31	.29	.40	.27	.45	.45	.48	.42
Worsted edges.....	.29	.29	.30	.30	.38	.30	.48	.35	.50	.48	.54	.40
Blue serge.....	.31	.31	.31	.29	.36	.36	.39	.39	.45	.38	.50	.47
Blue serge.....	.28	.27	.30	.30	.42	.37	.44	.38	.54	.47	.50	.49
Green serge.....	.32	.32	.33	.33	.38	.38	.35	.34	.45	.43	.50	.44
Red serge.....	.32	.32	.34	.34	.38	.38	.38	.36	.48	.45	.50	.40
French flannels.....	.30	.30	.32	.32	.38	.38	.38	.32	.46	.36	.44	.37
Oxford clips.....	.25	.22	.27	.27	.28	.28	.30	.26	.32	.31	.32	.32
Blue chevot.....	.23	.19	.22	.22	.26	.26	.27	.27	.32	.32	.32	.26
White serge.....	.21	.20	.22	.22	.23	.23	.25	.19	.28	.27	.26	.25
Blue cloth.....	.39	.33	.45	.40	.53	.42	.60	.45	.70	.57	.70	.65
Blue cloth.....	.22	.22	.23	.23	.26	.26	.29	.29	.28	.28	.28	.28

## EXHIBIT XIII.

## CLASSIFICATION OF WOOLEN RAGS COMPILED BY THE FEDERAL TRADE COMMISSION.

## SUMMARY OF MAIN CLASSIFICATIONS OF WOOLEN RAGS.

## Old woolen rags:

Mixed country rags.

## Soft woolens—

Ungraded soft woolens.

Graded soft woolens.

## Hard woolens—

Rough cloth.

Skirted cloth.

Carpets.

Felts.

Haircloths.

Linseys.

Seams.

## New woolen rags:

## New woolen clips, ungraded—

Miscellaneous cuttings of wool and straight cotton materials, mixed.

Men's wear.

Women's wear.

Carriage and auto clips.

Felts.

## Headings, ungraded.

## Graded clips and headings—

Mixed materials.

## Straight materials—

Bunting.

Cheviots.

Flannels.

Delaines (including alpaca).

Homespun.

Kerseys.

Mackinaws.

Palm beach.

Serges.

Uniform materials.

Unions.

Worsteds.

Miscellaneous additional materials.

## OLD WOOLEN RAGS.

## Mixed country rags.

## Soft woolens:

## Ungraded soft woolens—

Mixed softs.

Wool bodies.

Delaine bodies.

## Graded soft woolens—

White softs.

Red softs.

Softs, graded as to other colors.

Small softs.

## Soft woollens—Continued.

## Graded soft woollens—Continued.

## Flannels—

- Coarse white flannels.
- Fine white flannels.
- Fine white flannels and serges.
- Black flannels.
- Blue flannels.
- Brown flannels.
- Red flannels (mixed)—
  - Scarlet.
  - Maroon.

## Delaines—

- Mixed.
- Dark.
- Light.
- Black.
- Black and white.
- Blue.
- Brown.
- Green.
- Red.
- Tan.
- White.
- Silesias (mixed)—
  - Dark.
  - Light.

## Knits—

- Black, dressed.
- Black, undressed.
- Blue (mixed)—
  - Dark.
  - Light.
- Brown.
- Gray (mixed)—
  - Coarse.
  - Silver or steel.
  - Sheep's gray.
  - Light gray underwear.
  - Soiled light gray underwear.
- Green.
- Red (mixed)—
  - Scarlet.
  - Maroon.
- White.
- White, soiled.
- Hoods—
  - Light.
  - Dark, including fancy knits and comforters.
- Knit boots.

## Merinos—

- Coarse dark with serges.
- Coarse dark without serges.
- Coarse lights with serges.

## Soft woolens—Continued.

## Graded soft woolens—Continued.

## Merinos—Continued.

Coarse lights without serges.  
 Coarse lights, free of black, with serges.  
 Coarse lights, free of black, without serges.  
 Coarse black and white with serges.  
 Coarse black and white without serges.  
 Fine black with thibets.  
 Fine dark with thibets.  
 Fine dark with thibets, free of black.  
 Fine black.  
 Fine light.  
 Fine light, free of black.  
 Fine black and white.  
 Fine dark merino flannels.

## Thibets—

Dark.  
 Black.  
 Dark, free of black.

## Serges—

Dark.  
 Light.  
 Black.  
 Black and white.  
 Blue (mixed)—  
   Dark.  
   Light.

Brown.

Green.

Red.

Tan.

White.

Voiles.

## Blankets—

White wool, border on.  
 White wool, free of border.  
 Light wool.  
 Laundry No. 1.  
 Laundry No. 2.  
 Linsey.  
 Horse.

## Hard woolens:

## Rough cloth—

Rough garments.  
 Rough cloth with vests.  
 Rough cloth, free of vests.  
 Rough cloth, without worsteds.  
 Rough worsteds—

Mixed.

Dark.

Light.

Graded for color.

Rough mixed vests.

## Hard woolens—Continued.

## Rough cloth—Continued.

- Rough mixed vests, without worsteds.

- Rough worsted vests.

- Satinets.

## Skirted cloth, mixed—

- Sorted from mixed rags.

- Ripped from rough.

- Mixed skirted worsted.

- Mixed skirted cloth, without worsteds.

- Mixed skirted vests.

## Skirted cloth, graded—

- Dark.

- Fine dark.

- Light (mixed)—

- Free of black.

- Black and white.

- Fine light cloth (mixed)—

- Free of black.

- Black and white.

- Black cloth (mixed)—

- Coarse.

- Fine.

- Blue cloth.

- Brown cloth.

- Dark oxford cloth.

- Gray cloth—

- Including gray chinchilla.

- Green cloth.

- Green billiard cloth.

- Red cloth.

- Tan cloth, mixed.

- Tan cloth, without coverts.

- Tan coverts.

- Cheviots.

- Homespun (mixed)—

- Light.

- Black and white.

- Satinets.

- Small cloth.

## Uniform cloth—

- Letter carrier (cadet).

- Army blue (mixed)—

- Dark.

- Light.

## Worsteds—

- Dark.

- Fine dark.

- Light (mixed)—

- Free of black.

- Black and white (including gray).

- Black (mixed)—

- Coarse.

- Fine.

**Hard woollens—Continued.****Skirted cloth, graded—Continued.****Worsteds—Continued.**

Blue.

Brown.

**Outthrows—**

Dark.

Light (including graded for color).

**Carpets:**

Mixed carpets.

Hard back carpets.

Soft back carpets.

Linsey carpets.

Wool carpets.

Carpet ravelings and balls.

**Felts:****Paper mill felts—**

Sound No. 1.

Sound No. 2.

Sound No. 3.

**Old wool felts—****Hard mixed colors—**

Dark.

White.

Graded for other colors.

**Soft mixed colors—**

Dark.

White.

Graded for other colors.

Boots.

Hats.

**Hair cloths (including press cloths):**

Mixed.

Camel's hair.

Goat and other hair.

**Mohair—**

Mixed.

White.

**Linseys:****Mixed linseys.****Graded linseys—**

Dark.

Light.

Blue.

Brown.

Black.

Gray.

Red.

White.

Trimmed white (free from colored edges, stripes, etc.).

**Linsey flannels—**

Mixed.

Dark.

## Linseys—Continued.

## Linsey flannels—Continued.

Light.  
 Blue.  
 Brown.  
 Black.  
 Gray.  
 Red.  
 White, (including wool ganzies).

## Linsey knits (including cotton sweaters)—

Dark.  
 Blue.  
 Brown.  
 Black.  
 Green.  
 Gray.  
 Red.  
 White ganzies.

## Linsey knits (wool faced, cotton backs)—

Dark.  
 Black.  
 Blue.  
 Brown.  
 Green.  
 Gray.  
 Red.  
 White.

## Seams:

## Rough seams—

Mixed.  
 Light.  
 Dark.

## Skirted seams—

Light soft woolens.  
 Dark soft woolens.  
 Light cloth and worsted (including graded for color).  
 Dark cloth and worsted.  
 Trimmers and seamers.

## NEW WOOLEN BAGS.

## New woolen clips, ungraded:

Miscellaneous cuttings of wool and straight cotton materials, mixed.

## Men's wear—

## Wool clips—

Blue and black worsted.  
 Fine merchant tailor.  
 Fine clothing house, light weight.  
 Fine clothing house, light and heavy weight.  
 Average clothing house suitings.  
 Average clothing house, heavy weights.  
 Mackinaws.

## New woollen clips, ungraded—Continued.

## Men's wear—Continued.

Wool, cotton warp and cotton-carded mixed—

Merchant tailor.

Fine clothing house.

Average clothing house suitings.

Average clothing house, heavy weights.

Mackinaws.

Cotton warp clips—

Clothing house.

Mackinaws.

Shirtings.

## Women's wear—

Wool clips—

Fine cloak and suit house, including serges.

Fine cloak and suit house, without serges.

Mixed cloakings.

Mixed flannels.

Mixed serges.

Wool, cotton warp and cotton mixed—

Fine cloak and suit house, including serges.

Fine cloak and suit house, without serges.

Mixed cloakings.

Mixed flannels.

Mixed serges.

Cotton warp clips—

Mixed cloakings.

Mixed suitings.

Mixed flannels.

Mixed serges.

Auto and carriage clips—

Wool.

Wool and cotton mixed.

Cotton warp.

Felts (mixed).

## WOOLEN HEADINGS—UNGRADED.

Worsted wool.

Worsted:

Wool and cotton warp mixed.

Cotton warp.

Oily.

Worsted and woolens mixed.

Worsted and woolens mixed, containing cotton warp.

Serge—

Wool.

Wool and cotton warp mixed.

Oily.

Cotton warp.

Serge and flannel mixed.

Serge and flannel mixed, containing cotton warp.

All-wool woolens—

Mixed fine.

Mixed coarse.



Woolens containing cotton warp mixed.

Woolens—

Cotton warp.

Oily.

Flannel—

Wool.

Wool and cotton warp mixed.

Cotton warp.

Graded clips:

Straight materials—

Bunting—

Dark.

Light.

Blue.

Red.

White.

Flags, wool.

Flags, wool, stitched with cotton.

Cheviots—

Mixed.

Light.

Black.

Blue (mixed)—

Dark.

Light.

Brown.

Green.

Red.

Tan.

Delaines (including alpaca)—

Mixed.

Dark.

Light.

Black and white.

White.

Felts—

Hard (mixed)—

Dark.

White.

Graded for other colors.

Soft (mixed)—

Dark.

White.

Graded for other colors.

Flannels—

Mixed.

Dark.

Light.

Black.

Blue (mixed)—

Dark.

Light.

Indigo.

Graded clips—Continued.

Straight material—Continued.

Flannels—Continued.

Brown.

Gray.

Green.

Oxford.

Red (mixed)—

Maroon.

Scarlet.

White.

Billiard cloth.

Homespuns—

Mixed.

Dark.

Light (mixed)—

Coarse.

Fine.

Black and white (mixed)—

Coarse.

Fine.

Brown.

Light brown and white (mixed)—

Coarse.

Fine.

Kerseys—

Mixed.

Light.

Black.

Blue.

Brown.

Tan.

Tan coverts.

White.

Mackinaws—

Mixed.

All wool.

Cotton warp.

Palm beach—

Mixed.

Dark.

Light.

Brown.

Gray.

Tan.

White.

Cool cloth.

Serges—

Mixed.

Dark.

Light (mixed)—

Tans in, free of black.

Black and white.

Graded clips—Continued.

Straight materials—Continued.

Serges—Continued.

Black.

Blue (mixed)—

Dark.

Light.

Brown.

Green.

Red.

Tan.

White.

• Edges (classed with worsted edges).

Uniform cloth—

Mixed.

Blue (mixed)—

Dark.

Light.

Indigo, without selvages.

Letter carrier (cadet).

Unions—

Mixed.

Mixed graded for color and weight—

Dark (mixed)—

Heavy weight.

Light weight.

Light (mixed)—

Heavy weight.

Light weight.

Black.

Blue.

Letter carrier (cadet).

Brown.

Gray.

Green.

Oxford.

Tan.

White.

Blanket.

Capmakers.

Cotton warp cloakings (including chinchillas)—

Mixed.

Dark.

Light.

Gray.

Black.

Blue.

Brown.

White.

Cotton warp serges—

Mixed.

Light.

Dark.

Black and white.

Graded clips—Continued.

Straight materials—Continued.

Unions—Continued.

Cotton-warp serges—Continued.

Black.

Blue.

Brown.

Green.

Red.

Shoe unions—

Mixed.

Light.

Black.

Brown.

White.

Shirting flannel unions—

Mixed.

Dark.

Light.

Blue.

Gray.

Worsted unions—

Mixed.

Dark.

Light.

Black.

Blue.

Brown.

Mercerized.

Worsted (wool)—

Mixed

Dark.

Light (mixed)—

Black and white.

Free of black.

Black, men's (without edges).

Black, ladies' (without edges).

Blue (without edges).

Brown.

Gray (smoke).

Oxford.

Edges, including serge—

Mixed.

Black.

Blue.

Silk worsteds.

Mixed materials—

Graded for quality—

Coarse dark clips, ordinary.

Coarse dark clips, heavy weight.

Coarse dark clips, including oxfords.

Coarse light clips, No. 1 grade.

Coarse light clips, No. 2 grade.

Coarse black and white clips, including gray.

**Graded clips—Continued.****Mixed materials—Continued.****Graded for quality—Continued.**

Coarse brown and white clips, including tan shades.

Fine dark heavy weight clips.

Fine dark cloth and worsted clips—

All light weight, free of edges.

Light and heavy weight mixed.

Fine dark heavy and light weight cloth, including some worsted.

Fine dark cloth mixed, including oxfords.

Fine dark cloth and worsted, including oxfords.

Fine light cloth—

Mixed.

Black and white, including gray.

Tan.

Fine light cloth and worsted—

Mixed.

Black and white.

Tan.

Fine mixed clips (colors, weights, and materials)—

All light weight.

Some heavy weight.

Heavy weight.

**Graded for color—****Black—**

Mixed.

Flannels and serges.

Flannels and worsteds.

Worsteds and serges.

Worsteds, cheviots, and kerseys.

**Blue—**

Flannels and serges.

Flannels and worsteds.

Worsteds and serges.

Worsteds, cheviots, and kerseys.

**Brown—**

Mixed.

Flannels and serges.

Flannels and worsteds.

Worsteds and serges.

Worsteds, cheviots, and kerseys.

**Green—**

Mixed.

Flannels and serges.

Flannels and worsteds.

Worsteds and serges.

Worsteds, cheviots, and kerseys.

Red (same subdivision as foregoing colors).

White (same subdivision as foregoing colors).

**Cap makers—****Cap pieces—**

Worsteds and serges (mixed) graded for color.

Woolens (mixed)—

Light weight.

Heavy weight.

Graded clips—Continued.

Mixed materials—Continued.

Graded for quality—Continued.

Cap clips—

Mixed.

Light.

Worsted (mixed)—

Dark.

Light.

Black.

Blue.

Brown.

Listings, wool—

Mixed.

Dark.

Light.

Wool and cotton warp mixed.

Cotton warp

Miscellaneous additional materials—

Astrachans.

Boucleys.

Fur felts.

Plushes.

Eiderdowns.

Pants bottoms (mixed)—

Worsted and serges.

Woolen.

Cotton warp.

Silk woolens.

#### KHAKI AND FORESTRY MATERIALS.

New clips:

Khaki Wool—

Mixed clips.

Worsted and serge clips.

Suiting clips.

Overcoating and puttee clips.

Cap clips.

Delaine clips.

Flannel clips.

Sweater clips—

Wool.

Wool and cotton mixed.

Cotton warp worsted and serge clips.

Cotton and wool puttee clips.

Headings:

With stitches—

Mixed woolens and worsteds.

Worsted and serges.

Suitings.

Overcoatings.

Overcoatings and suitings mixed.

Flannels.

Cotton warp worsteds and serges.

## Headings—Continued.

Without stitches—

(Classed as khaki clips and graded accordingly.)

Oily headings—

(A deduction of not less than 5 per cent nor more than 40 per cent from the maximum price of the clean grade is permissible, proportioned on the oil contained in the lot sold.)

Old cloth:

Rough mixed.

Rough caps.

Skirted mixed.

Skirted worsteds and serges.

Skirted woollens.

Shirtings—

Worsted and serge rough.

Worsted and serge skirted.

Sweaters and Jerseys—

Wool.

Cotton and wool mixed.











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